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S U M M A R Y O F R E G I S T E R E D
A G R I C U L T U R A L P E S T I C I D E C H E M I C A L U S E S
(2nd Edition)
Supplement II

This supplement reflects changes and additions issued in preliminary notices numbered 65-13 through 65-175.

Pesticides Regulation Division
Agricultural Research Service
United States Department of Agriculture

October 1, 1965

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE
Washington, D. C. 20250

July 1, 1964

There is attached a second edition of the USDA Summary of Registered Agricultural Pesticide Chemical Uses which is a compilation of agricultural pesticide chemical uses registered with the U.S. Department of Agriculture.

This publication replaces the first edition of the USDA Summary of Registered Agricultural Pesticide Chemical Uses issued March 1, 1961, including the additions and supplements added since then. The first edition and its supplements are obsolete and should be destroyed.

Supplements to the second edition will be issued periodically to show additions, deletions, and revisions, as was done for the first edition.

Attachment

Issued: 7-1-64

Printed: November 1964

A SUMMARY OF AGRICULTURAL PESTICIDE USES REGISTERED
WITH THE U.S. DEPARTMENT OF AGRICULTURE

(2nd Edition)

This Summary has been compiled as a service to State and Federal regulatory officials having responsibility for the proper use of pesticides. Agricultural research agencies, agricultural advisors, food processors, and registrants may find it a useful reference. THIS SUMMARY IS NOT A LIST OF RECOMMENDATIONS, nor does it modify or supplant any recommendation made by this Department or any of the various States.

This Summary is a compilation of pesticide uses which directly or indirectly involve raw agricultural commodities, that is food or feed in its raw or natural state. The following is a brief description of the types of pesticide use patterns which are entered in the Summary as well as the use patterns which are not entered in the Summary.

I. Types of use which are entered in the Summary

1. Treatments to crops which will be used as food or feed, or the produce thereof used for food or feed.
2. Soil treatments to land which is or will be planted to crops (described in I.1.).
3. Postharvest treatments to raw agricultural commodities in the field or in storage.
4. Seed treatments to seed that is likely to be diverted to food or feed use, and uses involving systemic pesticides.
5. Treatments to crops which are grown for seed only when the seed is likely to be diverted to food or feed use, and in the case of new and unusual uses of plant regulators, desiccants, or defoliants.
6. Treatments to animals which are used for the production of meat, milk, eggs, or other raw agricultural commodities.
7. Treatments to agricultural premises which could result in the contamination of raw agricultural commodities.

II. Types of use which are not entered in the Summary

1. Seed treatments other than those described in I.4. above.
2. Treatments to crops grown for seed only, other than those described in I.5. above.
3. Treatments to processed food or feed.
4. Household, commercial, and institutional uses not involving raw agricultural commodities.
5. Treatments to ornamentals, forests, and nonfood crops.
6. Uses on animals other than those described in I.6.

The absence from the Summary of the use patterns which come under Type II above in no way affects the acceptability of these uses for registration under the Act.

The charts show tolerances and exemptions from the need of tolerances which have been established by the Department of Health, Education, and Welfare under provisions of the Pesticide Chemicals Amendment to the Federal Food, Drug, and Cosmetic Act. The charts also show those pesticides which have been formally classified "safe chemicals" under that statute.

When two or more pesticidal chemicals are mixed, the limitations applicable to the ingredients having the most restricted registrations should be followed.

As new chemicals and new patterns of use are registered by the Department, they will be added to present listings. A pattern of use now listed will be revised or deleted should new information support such action.

If you use pesticides, apply them only when needed and handle them with care. Follow the directions and heed all precautions on the container label. If pesticides are handled or applied improperly, or if unused portions are disposed of improperly, they may be injurious to humans, domestic animals, desirable plants, honey bees and other pollinating insects, fish, and wildlife, and may contaminate water supplies.

USE CHEMICALS SAFELY--FOLLOW LABEL DIRECTIONS

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EXPLANATION OF CHARTS

Charts are set up for individual pesticide chemicals, which are identified by the well-known common names as well as by the chemical designations.

The heading of each chart includes the principal formulations which have been registered for the chemical involved. These will cover emulsifiable concentrates (EC), wettable powders (WP), solutions, dusts, powders, fumigants, sprays, granular products, fertilizer mixtures, and pressurized products, where appropriate.

The tabulations on the charts are divided into four columns under the following headings:

- (1) "USE" In this column are listed the crops, animals, or sites of application to which the pesticide is applied.
- (2) "TOLERANCE" In this column is shown the tolerance, the exemption from need for a tolerance, or a declaration as a "safe chemical," if one has been established by the Food and Drug Administration.
- (3) "DOSAGE" This column gives the maximum quantity of the actual chemical that may be applied per single application. It is shown in pounds per acre, percentage concentration, or other specified form.
- (4) "LIMITATIONS (and/or Directions)" -- In this column are listed specific limitations on the application of the pesticide to the given use, applicable under current registrations. These are usually given in the number of days required between last application and harvest. Brief directions for application are also listed in some cases.

EXPLANATION OF CHARTS (Cont'd.)

All acceptable uses (dosage rates and related limitations) cannot be shown in the charts. The single dosages and the specific limitations given represent the maximum for safe use. In interpreting the charts, any use involving the dosage given with a longer time limit, or a lower dosage, with the same time limits, would be equally acceptable. A label submitted for registration which lists a higher dosage or more lenient limitations would require data to support such claims before the label could be registered.

USDA SUMMARY OF REGISTERED AGRICULTURAL PESTICIDE CHEMICAL USES
(2nd Edition)
I N D E X

Names in small letters: chemical names.
Names in small letters with an asterisk: coined common names.
Names capitalized: other names.
Prefixes alphabetized: any prefix consisting of two or more letters,
such as bis, di, tri, etc.
Prefixes not alphabetized: numbers; any prefix consisting of only one
letter such as O, N, S, P, etc.

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USDA Summary of Registered Agricultural Pesticide Chemical Uses

ALDRIN

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Field, Fiber & Forage Crops:			
Lespedeza	0	5.0	Preplanting soil application or at time of planting or transplanting. Double dosage on peat or muck soils.
Millet			
Milo	0.1		
Oats	(grain) 0.25 (straw)	0.25	Wet or dry bait formulations. Follow preharvest intervals required for comparable dosage on each crop.
Pasture Grass			
Popcorn	0		
Rice	0.1 (grain) 0.25 (straw)		
Rye	0.1 (grain) 0.25 (straw)		
Safflower			
Soybeans	0		
Sugarcane			
Vetch			
Wheat	0.1 (grain) 0.25 (straw)		
Flax		0.25	Do not feed to dairy animals within 28 days after treatment. Do not feed to animals being finished for slaughter.
Grain Crops (seed)		2.0 oz./bu.	Do not use as food or feed.
Grapefruit	0.25	0.25	30 days.
Grapes	0.1	0.25	7 days.
Grass			
Pasture Range		1.0	Do not feed treated forage to dairy animals or animals being finished for slaughter.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

AIDRIN

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Grass (cont.)		0.125-0.25	Single application per season. Do not graze dairy animals on treated forage. Avoid grazing animals moving to slaughter for 90 days following date of application. Other livestock to be overwintered may remain on treated areas.
Horseradish	0.25	0.5	7 days.
Kale	0.25	0.5	14 days.
Kohlrabi	0.25	0.5	14 days.
Lemons	0.25	0.25	30 days.
Lettuce	0.25	0.5	30 days.
Lima Beans (seed)		2.0 oz./bu.	Do not use as food or feed.
Limes	0.25	0.25	30 days.
Mangoes	0.1	0.25	21 days.
Melons	0.1	0.5	7 days.
Mint		5.0	Preplanting soil application or just prior to fall or spring discing or harrowing in old plantings.
Mustard Greens	0.25	0.5	14 days.
Nectarines	0.1	0.25	21 days.
Oats	0.1 on grain 0.75 on straw	0.5	7 days. Do not feed straw which was treated within 30 days of harvest to livestock.
Oats (seed)		2 oz./bu.	Do not use as food or feed.
Onions	0.25	0.5	Apply in a 12 inch band over row. Make one application when seedlings first appear, a second 10 days later, and a

USDA Summary of Registered Agricultural Pesticide Chemical Uses

3-AMINO-2,5-DICHLOROBENZOIC ACID*

PRINCIPAL FORMULATIONS: 23.4% liquid; 10.8% granular ammonium salt

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Asparagus		3.0	Preemergence application to seedbed immediately after planting (seed only).
Beans (dry)		3.0	Preplant soil incorporation. Mix with 1-2 inches of soil immediately after application. Do not graze treated areas or use treated plants for feed or forage. or Preemergence application. Do not graze treated areas or use treated plants for feed or forage.
Corn (field)		2.0	Preemergence application at time of planting. Plant seed 2-2 1/2 inches deep. Do not apply to light sandy soils.
Lima Beans		4.0	Preemergence application. Do not graze livestock on treated areas. Do not feed plant parts to livestock.
Peanuts		3.0	Preemergence application at time of planting.
Peppers		4.0	Post transplanting application 3-5 days after transplanting to clean cultivated soil. Do not use on light sandy soil. Do not graze or use plants from treated areas for feed or forage. or Apply 4 weeks after transplanting to clean cultivated soil. Do not graze or use plants from treated areas for feed or forage. or Apply immediately after last cultivation. Do not graze or use plants from treated areas for feed or forage.
Pumpkins		4.1	Preemergence application at time of planting.

*Proprietary name: "Amiben"
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3-AMINO-2,5-DICHLOROBENZOIC ACID

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Safflower (seed crop)		lbs. actual/A. 2.0	Preplanting soil application. Mix with 1-2 inches of soil immediately after application. Do not use crops grown on treated land for food, feed, or oil. Do not feed forage to livestock. or Preemergence application. Do not use crops grown on treated land for food, feed, or oil. Do not feed forage to livestock.
Soybeans		3.0	Preemergence application at time of planting or shortly after. Do not graze treated areas or use treated plants for food or forage.
Squash		4.1	Preemergence application at time of planting.
Sweet Potatoes		4.0	Apply in band over row immediately after transplanting and before weeds emerge. Do not graze treated areas or use treated plants for feed or forage.
Tomatoes		4.0	Post-transplanting - single application 3-5 days after transplanting to clean cultivated soil. Do not use on light sandy soil. Do not graze or feed plants from treated areas to livestock. or 4 weeks after transplanting to clean cultivated soil. Do not graze or feed plants from treated areas to livestock. or Immediately after last cultivation. Do not graze or feed plants from treated areas to livestock.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

AMMONIUM NITRATE

PRINCIPAL FORMULATIONS: 39.5% and 44.6% liquid

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Cotton	Exempt	lbs. actual/A. 72.0	Desiccant - apply 2-7 days before expected harvest. Keep livestock off treated areas. Do not feed gin trash to livestock.
		61.0	Defoliant - apply 7-14 days before expected harvest. Keep livestock off treated areas. Do not feed gin trash to livestock.

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AMMONIUM POLYSULFIDE

PRINCIPAL FORMULATIONS: 65% liquid

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Apples		4 pints of 65% liquid per 100 gals. of water	Do not apply after petal fall.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

AMMONIUM SULFAMATE*

PRINCIPAL FORMULATIONS: 80% and 95% soluble powders

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Apples	5	54 lbs./100 gals. water	Apply as a wetting spray to poison ivy in full leaf. Keep spray off tree foliage and fruit.
Pears	5	54 lbs./100 gals. water	Apply as a wetting spray to poison ivy in full leaf. Keep spray off tree foliage and fruit.
Rangelands and pastures		100 lbs./100 gals. water	For the control of woody plants, wet foliage thoroughly. Apply after brush reaches full leaf stage until leaves change color in fall.

*AMS

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ANILINO CADMIUM DILACTATE - PHENYL MERCURY FORMAMIDE MIXTURE

PRINCIPAL FORMULATIONS: Proprietary mixture of 6.25% anilino cadmium dilactate and 6.25% phenyl mercury formamide

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		oz./bu.	
Barley		5.0	Seed treatment only. Do not use treated seed for food, feed, or oil.
Flax		5.0	Seed treatment only. Do not use treated seed for food, feed, or oil.
Oats		5.0	Seed treatment only. Do not use treated seed for food, feed, or oil.
Rye		5.0	Seed treatment only. Do not use treated seed for food, feed, or oil.
Sorghum		5.0	Seed treatment only. Do not use treated seed for food, feed, or oil.
Wheat		5.0	Seed treatment only. Do not use treated seed for food, feed, or oil.

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ARAMITE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Corn (sweet)	0	0.5 spray	Do not apply after tasseling. Do not feed treated corn foliage to livestock.
Cotton		1.5	Do not apply after bolls open. (30 days before harvest). Do not graze treated fields or feed gin waste to livestock.
Cucumbers	0	1.2 dust 0.375 spray	Do not apply after edible parts start to form.
Currants		1.35 dust 0.5 spray	Do not apply after edible parts start to form.
Eggplants		1.2 dust 0.375 spray	Do not apply after edible parts start to form.
Grapefruits	0	1.2 dust 4.0 spray	Do not apply when fruit at any stage of growth is present.
Grapes	0	1.35 dust 0.5 spray	Do not apply after edible parts start to form.
Lemons	0	1.2 dust 4.0 spray	Do not apply when fruit at any stage of growth is present.
Lettuce		1.2 dust 0.45 spray	Do not apply after seedling stage.
Nectarines		3.0 dust 1.8 spray	Do not apply when fruit at any stage of growth is present.
Okra		1.2 dust 0.375 spray	Do not apply after edible parts start to form.
Oranges	0	1.2 dust 4.0 spray	Do not apply when fruit at any stage of growth is present.
Peaches	0	1.5 dust 2.0 spray	Do not apply after edible parts start to form.
Pears	0	1.5 dust 2.5 spray	Do not apply after edible parts start to form.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

ARAMITE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. Actual/A.	
Peppers	0	1.2 dust 0.375 spray	Do not apply after edible parts start to form.
Plums		1.5 dust 2.0 spray	Do not apply after edible parts start to form.
Potatoes		1.2 dust 0.375 spray	Foliage treatment only.
Prunes	0	1.5 dust 2.0 spray	Do not apply after edible parts start to form.
Quince		3.0 dust 1.8 spray	Do not apply when fruit at any stage of growth is present.
Raspberries		1.35 dust 0.5 spray	Do not apply after edible parts start to form.
Spinach	0	1.2 dust 0.45 spray	Do not apply after seedling stage.
Squash		1.2 dust 0.375 spray	Do not apply after edible parts start to form.
Strawberries		1.2 dust 0.5 spray	Do not apply after edible parts start to form.
Tomatoes	0	1.35 dust 0.375 spray	Do not apply after edible parts start to form.
Walnuts	0	1.2 dust 4.0 spray	Do not apply after husks split or within 15 days of harvest. Do not feed hulls to livestock.
Watermelons		1.2 dust 0.5 spray	Do not apply after edible parts start to form.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

ATRAZINE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Pineapples		lbs. actual/A. 6.4	Broadcast application immediately after planting or after plant crop harvest is completed.
		1.6	Apply at 1-2 month intervals. Do not apply more than 30 lbs. per acre per crop cycle. Do not apply within 160 days of fruit harvest. If forage is to be fed to livestock, allow 250 days between last application and feeding.
Sorghum		3.0	Preemergence or early postemergence application before weeds are 1 1/2 inches high. May incorporate 1/2 to 1 1/2 inches deep. Do not plant any crop other than corn or sorghum on treated area within 18 months after application. Do not graze or feed forage from treated area within 60 days after application.
Sugarcane		4.0	Preemergence application at time of planting or ratooning and before weeds or cane have emerged. or Postemergence application. Apply once as overall treatment or twice between rows as directed spray. Do not apply more than 10 lbs./A./season. Apply no later than "close in" after planting, ratooning, or stubble crop.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

BACILLUS THURINGIENSIS BERLINER

PRINCIPAL FORMULATIONS: Dust containing 5 billion viable spores per gram of product; wettable powder containing 25 billion viable spores per gram of product.

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Alfalfa	Exempt	4.5×10^{13} viable spores/ acre	No time limitations.
Artichokes	Exempt	10.8×10^{13} viable spores/ acre	No time limitations.
Bananas	Exempt	5.5×10^{13} viable spores/ acre	No time limitations.
Broccoli	Exempt	10.8×10^{13} viable spores/ acre	No time limitations.
Cabbage	Exempt	10.8×10^{13} viable spores/ acre	No time limitations.
Cauliflower	Exempt	10.8×10^{13} viable spores/ acre	No time limitations.
Celery	Exempt	10.8×10^{13} viable spores/ acre	No time limitations.
Lettuce	Exempt	10.8×10^{13} viable spores/ acre	No time limitations.
Melons	Exempt	10.8×10^{13} viable spores/ acre	No time limitations.
Potatoes	Exempt	10.8×10^{13} viable spores/ acre	No time limitations.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

BENZALDEHYDE

PRINCIPAL FORMULATIONS: 98% technical grade

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Honey supers	Safe Chemical	Spinkle lightly 2 tablespoons on pad of the Fume Pad Chamber	Smoke bees slightly from above to get them running - then place treated fume pad over the top of the supers. Use in shade on a cool day. At the end of the day flush fume pads with water to clean them. Odor disappears from supers in 24 hours.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

BENZENE

PRINCIPAL FORMULATIONS: Technical material

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Grain (All) Barley Buckwheat Corn Oats Rice Rye Sorghum Wheat		1.25 gal./ 1000 bu.	Formulated with other grain fumigants. Expose to fumigation for 12 hours. 24 hour aeration period.
Animals: Beef Cattle Dairy Cattle Goats Sheep Swine		100%	Apply locally to wounds, etc. for screw- worm control. Also formulated with various other screw-worm remedies as smears, liquids, aerosols, etc. Repeat as necessary until wounds have healed.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

BENZYL BENZOATE

PRINCIPAL FORMULATIONS: 30% in liquid

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Animals (All)		35.0% liquids or ointments	To be used by or on prescription of a veterinarian only. Apply liberally with a swab or brush as a spot treatment on and around infested areas. Used primarily for certain types of mange.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

BETA HYDROXY ETHYL HYDRAZINE

PRINCIPAL FORMULATIONS: 80% solution

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Pineapples		lbs. actual/A. 3.7	Flower induction. Apply to mature plants 40-55 days before flowering. Do not apply within 1 month of first picking. Do not feed pineapple bran or foliage from plants treated within 120 days before harvest.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

BETA-NAPHTHOXYACETIC ACID

PRINCIPAL FORMULATIONS: 1.23% liquid; 0.00325% low pressure bomb;
98% sodium salt

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Pineapple		1.12 lbs. acid equiv./A.	Increase size and delay maturity. Apply 6-10 weeks before expected normal peak harvest. Do not apply within 42 days of harvest. Fruit must be washed before processing. Fruit entering the fresh fruit trade must be washed before release by the grower.
Strawberries		50 ppm	Apply 14-16 days after first bloom. Repeat application 4-5 days later. Do not apply within 14 days of harvest.
Tomatoes Field Greenhouse		42 ppm or 6.75 grams per acre	Blossom set. Apply in 50-100 gals. water when first flowers appear. Repeat at 10-20 day intervals. Do not make more than 3 applications. Do not apply within 15 days of harvest.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

BHC (Technical)*

PRINCIPAL FORMULATIONS: Wettable powders containing 12%-36% gamma isomer; dusts containing 1%-3% gamma isomer; emulsifiable concentrates containing 2 lbs. gamma isomer per gallon

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. Actual/A. of gamma isomer	
Alfalfa		0.5	Do not apply after growth is 2 inches tall. Do not pasture until after first cutting. 40 day preharvest limitation also acceptable.
Apples	5	3.6	60 days or not after fruit starts to form.
Apricots	5	3.0	60 days.
		1.0	Brush or spray on lower branches and trunk only.
Asparagus	5	0.3	Do not apply during cutting season.
Avocado	5	3.6	Apply immediately prior to blossoming or immediately after fruit has set.
Barley		2.0 oz./bu.	Do not use as food or feed.
Beans	5	0.3	Do not apply after pods start to form.
Beans (Seed)		2.0 oz./bu.	Do not use as food or feed.
Blackeyed Peas	5	0.3	Do not apply after pods start to form.
Blackeyed Peas (Seed)		2.0 oz./bu.	Do not use as food or feed.
Blueberries		2.0	Do not apply after edible parts start to form.
Broccoli	5	0.5	Do not apply after seedling stage.

*1,2,3,4,5,6-hexachlorocyclohexane

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USDA Summary of Registered Agricultural Pesticide Chemical Uses

BINAPACRYL*

PRINCIPAL FORMULATIONS: 50% wettable powder; 4% dust

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Almonds		2.0	Do not apply after husks split. Do not feed treated hulls to livestock.
Apples		2.0 (spray)	Do not apply more than 4 times during the fruiting period. Do not apply within 60 days of harvest.
		2.0 (dust)	Do not apply more than 3 times during the fruiting period. Do not apply within 30 days of harvest.
Cotton		2.0	Do not apply after bolls begin to open. Do not feed treated forage to livestock. Use limited to Arizona, California, and New Mexico only.
Grapes		1.6	Do not apply within 45 days of harvest. Do not apply more than twice during fruiting period.
Pears		2.0 (spray)	Do not apply more than 3 times during the fruiting period. Do not apply within 60 days of harvest.
		2.0 (dust)	Do not apply more than 3 times during the fruiting period. Do not apply within 30 days of harvest.
Plums		2.0	Do not apply more than 2 times after petal fall. Do not apply within 60 days of harvest.
		1.5	Do not apply more than 2 times after petal fall. Do not apply within 45 days of harvest.

*2-sec-butyl-4,6-dinitrophenyl
3-methyl-2-butenolate

USDA Summary of Registered Agricultural Pesticide Chemical Uses

BINAPACRYL

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Prunes (fresh)		2.0	Do not apply more than 2 times after petal fall. Do not apply within 60 days of harvest.
		1.5	Do not apply more than 2 times after petal fall. Do not apply within 45 days of harvest.
Walnuts		2.0	Do not apply after husks split. Do not feed treated hulls to livestock.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

2,3,4,5-BIS(2-BUTYLENE) TETRAHYDRO FURFURAL*

PRINCIPAL FORMULATIONS: 0.2%-5.0% in petroleum distillate or 0.1%-0.2% in water,
in combination with other insecticidal ingredients

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Animals:			
Beef Cattle		0.2% in oil	Apply as a mist spray. Do not wet hides of animals.
Dairy Cattle			
Goats		2.0% in oil	Apply by rubbing devices. No limitations.
Sheep			
Swine		0.2% in water	Apply 1 quart per animal the size of an adult cow. Apply daily for 3 days and every second day thereafter for residual repellency.
Agricultural Premises:			
Barns		0.2% in oil	Apply as a space spray in dairy barns when cows are in barn. Formulated with other ingredients. Do not contaminate milk or milking equipment.
Dairy Barns			
Feed Rooms		5.0% in oil	Apply to all interior surfaces. May be formulated with other ingredients. Do not contaminate milk, milk handling equipment, feed or drinking water.
Hog Pens			
Milk Rooms			
Poultry Houses		0.1% in water	Apply thoroughly to all surfaces to the point of run-off. Formulated with other ingredients. Do not contaminate milk, milk handling equipment, feed, or drinking water.
Etc.			

*Proprietary name: "MGK R-11"

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USDA Summary of Registered Agricultural Pesticide Chemical Uses

1-1-BIS (CHLOROPHENYL)-2,2,2-TRICHLOROETHANOL*

PRINCIPAL FORMULATIONS: 18.5% wettable powder; 10.5% emulsifiable concentrate containing 1.91 lbs. of technical "Kelthane" per gallon (1.62 lbs. of active ingredient per gallon)

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Almonds		4.0	14 days. Do not feed treated hulls to livestock.
Apples	5.0	4.5	7 days.
Apricots	10.0	3.2	14 days.
Avocadoes		4.0	Apply before fruit forms or after harvest only.
Beans			
Dry	5.0	0.6 (spray)	7 days. Do not feed treated vines to meat or dairy animals.
Green		1.5 (dust)	
Lima		1.0 (spray)	California only. 45 days. Do not feed treated vines or forage to dairy animals or animals being finished for slaughter.
Beans			
Dry	5.0	0.8 (spray)	45 days. Do not feed treated vines to meat or dairy animals.
Blackberries	5.0	1.2	2 days.
Boysenberries	5.0	1.2	2 days.
Bushnuts	5.0	4.0	14 days.
Butternuts	5.0	4.0	14 days.
Cantaloupes	5.0	0.6 (spray) 1.5 (dust)	2 days.
Cherries	5.0	3.2	7 days. Do not repeat application within 30 days.
Chestnuts	5.0	4.0	14 days.
Citrus (all)	10.0	8.0	7 days.

*Proprietary name: "Kelthane"
 Issued: 10-1-65

USDA Summary of Registered Agricultural Pesticide Chemical Uses

1,1-BIS(CHLOROPHENYL)-2,2,2-TRICHLOROETHANOL

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Corn (Field corn only)		1.6	Do not apply after ears begin to form. Do not ensile treated corn or use it as forage.
Cotton	0.1 (on seed)	1.6	14 days. Do not graze treated fields by meat or dairy animals.
Crabapples	5.0	4.5	7 days.
Cucumbers	5.0	0.6 (spray) 1.5 (dust)	2 days.
Dewberries	5.0	1.2	2 days.
Eggplants	5.0	0.8 (spray) 1.5 (dust)	2 days.
Figs	5.0	2.0	7 days. Do not repeat application within 30 days.
Grapes	5.0	1.2 (spray) 1.5 (dust)	7 days.
Hops	30.0	1.2 (spray) 1.5 (dust)	7 days.
Loganberries	5.0	1.2	2 days.
Melons	5.0	0.6 (spray) 1.5 (dust)	2 days.
Mint		1.5	Apply only to mint grown in Pacific Northwest States for commercial oil production. No application within 30 days of harvest. Do not ship interstate, or feed fresh or spent mint hay to dairy animals or animals being finished for slaughter.
Nectarines	10.0	3.2	14 days.
Nuts (all)	5.0	4.0	14 days.
Peaches	10.0	3.2	14 days.
Pears	5.0	4.5	7 days.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

2,4-BIS (ISOPROPYLAMINO)-6-METHYL THIO-s-TRIAZINE*

PRINCIPAL FORMULATIONS: 80% wettable powder

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Cotton		lbs. actual/A. 0.64 2.4	Postemergence application as a directed spray when weeds are less than 2 inches tall and cotton is 6 inches tall. Preplanting soil incorporation. Do not graze or feed forage from treated areas to livestock. or Preemergence soil application. Do not graze or feed forage from treated areas to livestock. or Apply at time of last cultivation as a directed spray. Do not graze or feed forage from treated areas to livestock.
Potatoes		3.0	Preemergence application or single application at time of drag-off. Use winter rye for cover crop. Do not use cover crop for food or feed.

*Proprietary name: Prometryne
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USDA Summary of Registered Agricultural Pesticide Chemical Uses

2,4-BIS (3-METHOXYPROPYLAMINO)-6-METHYL THIO-s-TRIAZINE

PRINCIPAL FORMULATIONS: 25.5% emulsion concentrate

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Safflower		lbs. actual/A. 0.75	Post-emergence application after rosette stage and up to six weeks after planting. Do not apply more than once per year.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

CALCIUM CYANAMIDE

PRINCIPAL FORMULATIONS: 57% dust; 44%, 46% and 47% granular

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Asparagus		213	Preemergence and postemergence. Apply when weeds are 1 inch high. Repeat treatment during cutting season. Wash tips before marketing.
Beans		440	Soil application 30 days before planting.
Blueberries		114 (dust)	Dormant application only.
		188 (granular)	Dormant application only.
Celery		440	Soil application 30 days before planting.
Cotton		28.5	Preharvest defoliation. Apply when latest bolls that will make cotton mature, or 7-14 days before harvest.
Crucifers		310	Soil application 30 days before planting.
Fruit Trees:			
Almonds		171	Two equal applications of 85.5 lbs. each. First in early spring. Second about ten days later.
Apples		(soil)	
Apricots			
Avocados			
Cashews			
Cherries			
Chestnuts			
Dates			
Figs			
Gilberts			
Guavas			
Hazelnuts			
Hickory Nuts			
Mangoes			
Nectarines			
Olives			

USDA Summary of Registered Agricultural Pesticide Chemical Uses

CALCIUM CYANAMIDE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. Actual/A.	
Fruit Trees: (Cont.)			
Papayas		171	Two equal applications of 85.5 lbs. each.
Passion Fruit		(soil)	First in early spring. Second about ten
Peaches			days later.
Pears			
Pecans			
Persimmons			
Plums			
Pomegranate			
Prunes			
Quinces			
Walnuts			
Grains:			
Barley		57	Apply when majority of weeds show 4
Oats			leaves. (About 1 inch high).
Rice			
Rye			
Wheat			
Hops		154	Before hoeing and before buds emerge.
Lettuce		440	Soil application 30 days before
			planting.
Peas			
(Canning)		45.6	Apply when majority of weeds show 4
			leaves (about 1 inch high).
Potatoes		440	Soil application 30 days before
			planting.
Timothy		114	Spring application when crop is 3 inches
			high. (May cause temporary browning
			of grass).
Tomatoes		440	Soil application 30 days before
			planting.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

CALCIUM CYANIDE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Agricultural Premises:		lbs. Actual/A.	
Mushroom Houses		17.6 gms./1000 cu. ft.	Apply when crop is in production. Start fumigation at 60 degrees F. and gradually increase heat. Repeat treatment 7 times at 3 day intervals.
		148 gms./1000 cu. ft.	Apply when no mushrooms are present. Houses should be kept heated (130-140 degrees F.) and exposed to fumigation for 12 hours.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

2-CAPRYL-4,6-DINITROPHENYL CROTONATE*

PRINCIPAL FORMULATIONS: 25% wettable powder; 1%, 5%, and 10% dusts

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Almonds		2.0	Apply during delayed dormant to jacket stage only.
Apples		3.0	21 days.
Apricots		1.0	45 days.
Cantaloupes		0.5	7 days.
Cucumbers		0.5	7 days.
Cucumbers (greenhouse)		0.25	7 days.
Gooseberries		0.38	21 days.
Grapes		0.75	21 days.
Honeydew Melon		0.56	7 days.
Muskmelon		0.56	7 days.
Peaches		1.0	45 days.
Pears		2.25	21 days.
Pumpkins		0.56	7 days.
Raspberries		0.63	7 days.
Squash		0.5	7 days.
Strawberries		0.38	21 days.
Watermelons		0.56	7 days.

*Proprietary name: "Karathane"

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USDA Summary of Registered Agricultural Pesticide Chemical Uses

CAPTAN*

PRINCIPAL FORMULATIONS: 25% wettable powder
 50% wettable powder
 75% wettable powder (seed treatment only)
 5.0%, 7.5%, 10.0% and 20.0% dusts

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Almonds	100	8.0	Five weeks after petal fall.
		16.0	12 days. Do not feed treated hulls to dairy animals or animals being finished for slaughter.
Apples	100	8.0	No time limitations.
		0.12% solution	Postharvest spray or dip.
Apricots	100	5.0	Cover sprays--no time limitations.
		0.12% solution	Postharvest spray or dip.
Asparagus	100	1.5 lbs./100 gals. water	Preplanting root dip.
Avacadoes	100	10.0	No time limitations.
Barley		1.2 oz./100 lbs.	Seed treatment (dry).
		1.4 oz./100 lbs.	Seed treatment (slurry).
			Do not use treated seed for food or feed.
Beans (dry and succulent)	100	6.0	Preplanting soil treatment.
		1.25	No time limitations.
		1.9 oz./100 lbs.	Seed treatment (dry).
		1.4 oz./100 lbs.	Seed treatment (slurry).
			Do not use treated seed for food or feed.
Beets, garden (roots & tops)	100	1.5	No time limitations.
		3.3	Preplanting soil treatment.
Blackberries	100	2.5	No time limitations.

*N-trichloromethylmercapto-4-cyclohexene-1:2-dicarboximide

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CAPTAN

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. Actual/A.	
Blueberries	100	2.5	No time limitations.
Broccoli	100	14.0	Preplanting soil application only.
Brussels sprouts	100	14.0	Preplanting soil application only.
Cabbage	100	14.0	Preplanting soil application only.
Cantaloupes	100	3.8	No time limitations.
		0.25% solution	Post-harvest spray or dip.
		7.5	Preplanting soil treatment only.
Carrots (Roots)	100	3.0	No time limitations.
Cauliflower	100	14.0	Preplanting soil application only.
Celery	100	2.0	No time limitations.
		6.5	Plant bed treatment.
Cherries	100	10.0	No time limitations.
		0.125% solution	Post-harvest dip.
Citrus Fruits:			
Grapefruit	100	10.0	No time limitations.
Lemons	100		
Limes	100	0.12% solution	Post-harvest dip or spray. Do not feed raw citrus byproducts bearing captan residues to dairy animals or animals being finished for slaughter.
Oranges	100		
Tangeloes	100		
Tangerines	100		
Oranges	100	5.0	Apply as after bloom spray from 2/3 petal fall until fruit reaches approxi- mately 1/2 inch in diameter. Do not feed treated raw citrus byproducts to livestock.
Tangeloes	100		

USDA Summary of Registered Agricultural Pesticide Chemical Uses

CAPTAN

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Onions (green and bulb)	100	lbs. actual/A. 1.5	No time limitations.
		2.0	Furrow treatment to muck soils.
		0.12% solution	Postharvest spray or dip.
Packing boxes		1 lb./100 gals.	Spray boxes prior to packing fruits or vegetables or use as a dip.
Peaches	100	5.0	No time limitations.
		6.0	1 day.
		0.12% solution	Postharvest spray or dip.
Peanuts		6 oz./100 lbs.	Seed treatment (dry). Do not use treated seed for food, feed, or oil.
Pears	100	8.0	No time limitations.
		0.12% solution	Postharvest spray or dip.
Peas	100 (dry & succu- lent)	6.0	Preplant soil treatment.
		1.2 oz./100 lbs.	Seed treatment (dry).
		1.8 oz./100 lbs.	Seed treatment (slurry). Do not use treated seed for food or feed.
Peppers	100	3.0	No time limitations.
		6.0	Plant bed treatment after seeds have germinated.
		7.5	Preplanting soil treatment.
Pimentoes	100	3.0	No time limitations.
		6.0	Plant bed treatment.
Pineapples	100	10.0	No time limitations.
		0.6% in water	Postharvest dip or wash.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

CAPTAN

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. Actual/A.	
Plums	100	5.0	No time limitations.
Potatoes	100	0.12% solution	Post-harvest spray or dip.
		5.0	No time limitations.
		0.5 lb./bushel	Seed piece treatment.
Prunes	100	5.0	No time limitations.
Pumpkins	100	3.8	No time limitations.
Quinces	100	5.0	7 days.
Raspberries	100	2.5	No time limitations.
Rhubard (Forcing under glass)	100	1.5	No time limitations.
Rice		2.7 oz./100 lbs. 1.7 oz./100 lbs.	Seed treatment (dry). Seed treatment (slurry). Do not use treated seed for food or feed.
Rye		1.4 oz./100 lbs.	Seed treatment (slurry). Do not use treated seed for food or feed.
Safflower		0.3 oz./100 lbs.	Seed treatment (dry). Do not use treated seed for food, feed, or oil.
Sesame		1.0 oz./100 lbs.	Seed treatment (slurry). Do not use treated seed for food, feed, or oil.
Sorghum		3.0 oz./100 lbs. 2.3 oz./100 lbs.	Seed treatment (dry). Seed treatment (slurry). Do not use treated seed for food or feed.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

CAPTAN

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Soybeans		lbs. Actual/A.	
		6.0	Soil treatment at planting time.
		2.0 oz./100 lbs. 1.3 oz./100 lbs.	Seed treatment (dry). Seed treatment (slurry). Do not use treated seed for food, feed, or oil.
Spinach	100	3.5	Apply to furrow at time of planting.
		1.5	No time limitations.
		6.0	Preplanting soil treatment.
Squash (summer and winter)	100	3.8	No time limitations.
Strawberries	100	3.8	No time limitations.
Sunflowers		0.5 oz./100 lbs.	Seed treatment (dry). Do not use treated seed for food, feed, or oil.
Tomatoes	100	5.0	No time limitations.
		7.5	Preplanting soil treatment.
Field and greenhouse	100	0.5 pint of 0.12 solution per plant	Transplant water.
Watermelons	100	3.8	No time limitations.
Wheat		1.2 oz./100 lbs.	Seed treatment (dry).
		2.0 oz./100 lbs.	Seed treatment (slurry). Do not use treated seed for food or feed.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

CARBARYL*

PRINCIPAL FORMULATIONS: 50% wettable powder; 50% dust base; 5% dust; 20% granular

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Alfalfa	100	1.5	No time limitations.
Almonds	10 (whole almonds)	8.0	No time limitations.
	40 (almond hulls)		
Apples	10	12.0	1 day.
Apricots	10	8.0	3 days.
Asparagus	10	2.0	Apply during cutting season. Do not repeat application within 3 days. Do not apply within 1 day of harvest.
		4.0	Postharvest application to ferns and brush growth.
Bananas	10	1.1	Single application. No time limitations.
Beans	10	2.125	No time limitations.
Beets	5 (roots) 12 (tops)	2.0	Do not apply within 3 days of harvest. Do not apply within 14 days of harvest, if tops are to be used as food or feed.
Blackberries	12	2.0	7 days.
Blueberries	10	2.0	No time limitations.
Boysenberries	12	2.0	7 days.
Broccoli	10	2.0	3 days.
Brussels sprouts	10	2.0	3 days.

*1-naphthyl n-methylcarbamate
Proprietary name: "Sevin"

USDA Summary of Registered Agricultural Pesticide Chemical Uses

CARBARYL

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Cabbage	10	2.0	3 days.
Cabbage (Chinese)	10	2.0	14 days.
Carrots	10	2.0	No time limitations.
Cauliflower	10	2.0	3 days.
Cherries	10	6.0	1 day.
Citrus	10	1.25 lbs./ 100 gals.	5 days.
Clover	100	1.5	No time limitations.
Collards	12	2.0	14 days.
Corn	100 (forage) 5 (kernels & cob)	2.0	No time limitations.
Cotton	5.0 (on cot- tonseed) 100 (on cot- ton for- age)	2.5	No time limitations.
Cowpeas	5.0 (peas) 100 (forage)	2.0	No time limitations.
Cranberries	10	3.0 (spray) 4.0 (dust)	1 day.
Cucumbers	10	1.0	No time limitations.
Dandelion	12	2.0	14 days.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

CARBARYL

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Dewberries	12	2.0	7 days.
Eggplant	10	4.0	No time limitations.
Endive (Escarole)	10	2.0	14 days.
Filberts	5	5.0	No time limitations.
	1 (in nut meat with shells removed)		
Grapes	10	3.0	No time limitations.
Grapefruit	10	1.25 lbs./ 100 gals.	5 days.
Grass	100 (grass & hay)	1.5	No time limitations.
Horseradish	5	2.0	3 days.
Kale	12	2.0	14 days.
Kohlrabi	10	2.0	3 days.
Lettuce (Head)	10	2.0	3 days.
Lettuce (Leaf)	10	2.0	14 days.
Loganberries	12	2.0	7 days.
Melons	10	1.0	No time limitations.
Mustard Greens	12	2.0	14 days.
Nectarines	10	8.0	3 days.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

ALPHA ISOMER OF 2-CARBOMETHOXY-1-METHYLVINYL DIMETHYL PHOSPHATE

PRINCIPAL FORMULATIONS: 10% wettable powder; 1%-2% dusts; emulsifiable concentrate containing 2 lbs. of active ingredient per gallon; water soluble solution containing 2 lbs. of active ingredient per gallon

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Alfalfa	1.0	0.5	1 day.
Apples	0.5	3.2	1 day.
Artichokes	1.0	1.0	2 days.
Asparagus		0.5	3 days.
Barley		0.5	14 days.
Beans	0.25	0.5	1 day.
Beets (including tops)	1.0	0.5	3 days.
Broccoli	1.0	0.5 1.0	1 day. 3 days.
Brussels sprouts	1.0	1.0	3 days.
Cabbage	1.0	0.5 1.0	1 day. 3 days.
Cantaloupe	0.5 (edible portion)	0.5	1 day.
Carrots	0.25	0.5	1 day.
Cauliflower	1.0	1.0	3 days.
Celery	1.0	0.5 1.0	3 days. 5 days.
Cherries	1.0	2.6	2 days.
Clover	1.0	0.5	1 day.

*Proprietary name: "Phosdrin," Phosdrin insecticide contains not less than 60% of the alpha isomer of 2-carbomethoxy-1-methylvinyl dimethyl phosphate and not more than 40% of insecticidally active, related compounds

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ALPHA ISOMER OF 2-CARBOMETHOXY-1-METHYLVINYL DIMETHYL PHOSPHATE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Collards	1.0	0.5	3 days.
		1.0	7 days.
Corn:			
Field	0.25	0.5	1 day.
Pop	on grain		
Sweet	1.0		
Forage	on		
Grain	forage		
Cotton		0.75	3 days.
Cucumbers	0.25	0.5	1 day.
Cucumbers Greenhouse	0.25	0.1 lb./ 50,000 cu.ft.	1 day.
Eggplants	0.25	0.5	1 day.
Flax		0.5	14 days.
Grapefruit	0.25	2.0	1 day. Allow 7 days between applications.
Grapes	0.5	1.0	2 days.
Grass			
Pasture		0.5	1 day (5 days before cutting for grass hay to be shipped interstate).
Range			
Honeydew melons	0.5 (edible portions)	0.5	1 day.
Kale	1.0	0.5	3 days.
		1.0	7 days.
Lemons	0.25	2.0	1 day. Allow 7 days between applications.
Lettuce	0.5	0.5	2 days.
		1.0	4 days.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

ALPHA ISOMER OF 2-CARBOMETHOXY-1-METHYLVINYL DIMETHYL PHOSPHATE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Mint		0.5	30 days.
Muskmelons	0.5 (edible portions)	0.5	1 day.
Mustard greens	1.0	0.5	3 days.
Oats		0.5	14 days.
Okra	0.25	0.5	1 day.
Onions	0.25 on green onions	0.5	1 day.
Oranges	0.25	2.0	1 day. Allow 7 days between applications.
Peaches	1.0	2.56	1 day.
Pears	0.5	3.2	1 day.
Peas (including forage)	0.25 on peas 1.0 on forage	0.5	1 day.
Peppers	0.25	0.5	1 day.
Plums	1.0	2.56	1 day.
Potatoes	0.25	0.25	1 day.
Pumpkins		0.5	14 days.
Raspberries	1.0	0.64	3 days.
Safflower		0.5	7 days.
Sorghum (grain & forage)	1.0	0.5	3 days.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

ALPHA ISOMER OF 2-CARBOMETHOXY-1-METHYLVINYL DIMETHYL PHOSPHATE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Spinach	1.0	0.5	4 days.
		1.0	7 days.
Squash			
Summer	0.25	0.5	1 day.
Winter		0.5	14 days.
Strawberries	1.0	1.0	1 day.
Tomatoes	0.25	0.5	1 day.
Greenhouse	0.25	0.1 lb./ 50,000 cu.ft.	1 day.
Turnips (roots & tops)	0.25 on turnips 1.0 on tops	0.5	3 days.
Walnuts	0.25 (edible portions)	2.5	1 day.
Watermelons	0.5	0.5	1 day.
Wheat		0.5	14 days.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

CARBOPHENOTHION*

PRINCIPAL FORMULATIONS: 43.7% emulsifiable concentrate; 25% wettable powder;
3.0% and 4.0% dusts; 10% granular

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Alfalfa	5.0 (fresh forage & hay)	lbs. actual/A. 1.0	Do not apply more than once between cuttings. Do not graze or cut for hay within 28 days after application.
Almonds	10.0 (on hulls)	2.5 + 160.0 lbs. of oil in water 1.8 (dust)	Do not apply within 7 days of harvest if hulls are to be used as feed. Do not apply within 7 days of harvest if hulls are to be used as feed.
Apples	0.8	5.0 1.25	Apply 2 weeks after petal fall. Do not feed treated hulls to livestock. 30 days.
Apricots	0.8	2.0 + 128.0 lbs. of oil in water	30 days.
Beans (dry)	0.8 (beans) 5.0 (vines)	3.5 0.6 (dust) 0.5 (spray)	Use only on beans to be marketed as shelled dry beans. Do not feed treated vines or hulls to livestock. Do not apply more than twice per season. Do not graze or cut vines for hay within 21 days after application.
Beans (succulent) Snap Lima	0.8 (beans) 5.0 (vines)	0.75 (spray) 1.2 (dust) 0.6 (dust) 0.5 (spray)	7 days. Do not feed treated forage to livestock. Do not apply within 7 days of harvest. Do not apply more than twice per season. Do not graze or cut vines for hay within 21 days after application.

*O,O-diethyl S-p-chlorophenylthiomethyl phosphorodithioate
Proprietary name: "Trithion"

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CARBOPHENOTHION

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Beets	0.8 (on tops & roots)	0.5 (spray) 1.2 (dust)	21 days if tops are to be used as food or feed.
Blackberries		1.0	Post-harvest application only.
Cantaloupes	0.8	1.0 (spray) 1.2 (dust)	5 days.
Cherries	0.8	1.8 (dust)	30 days.
		2.0 + 128.0 lbs. of oil in water	30 days.
Citrus (all)	2.0	7.5 (in water)	30 days.
		5.0 + 160.0 lbs. of oil in water	30 days.
		5.0 (in water)	14 days.
		3.0 (dust)	14 days.
Clover	5.0 (fresh forage & hay)	1.0	Do not apply more than once between cuttings. Do not graze or cut for hay within 28 days after application.
Corn	2.0 (kernels & cobs with husks removed)	1.0	Do not apply more than once per season. Do not graze or cut for forage within 21 days after application.
	5.0 (forage)		

USDA Summary of Registered Agricultural Pesticide Chemical Uses

CARBOPHENOTHION

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Cotton	0.2 (in seed)	1.0	Do not graze dairy or meat animals in treated fields.
Crabapples	0.8	1.25	30 days.
Cranberries		1.0	Post-harvest application only.
Cucumbers	0.8	1.0	7 days.
Eggplants	0.8	1.0 (spray) 1.2 (dust)	7 days.
Figs	0.8	2.5	7 days.
Gooseberries		1.0	Post-harvest application only.
Grapes	0.8	0.5 (spray) 1.0 (dust)	30 days.
Nectarines	0.8	2.0 + 128.0 lbs. of oil in water	30 days.
Olives	0.8	9.0 + 288.0 lbs. of oil in water	60 days.
Onions	0.8 (dry or green)	2.0	Soil application only to furrow at planting time.
Peaches	0.8	2.0 + 128.0 lbs. of oil in water	30 days.
Pears	0.8	1.25	30 days.
Peas	0.8	0.75 (spray) 1.2 (dust)	7 days. Do not feed treated forage to livestock.
Pecans		2.5	Do not apply after husks open.
Peppers	0.8	1.0 (spray) 1.2 (dust)	7 days.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

CARBOPHENOTHION

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Pimientos	0.8	1.0 (spray) 1.2 (dust)	7 days.
Plums	0.8	2.0 + 128.0 lbs. of oil in water	30 days.
Potatoes (white)		1.0 (spray) 1.2 (dust)	No time limitations.
Prunes	0.8	2.0 + 128.0 lbs. of oil in water	30 days.
Quinces	0.8	1.25	30 days.
Raspberries		2.0	Postharvest application as a drench to the crown of plants.
Sorghum	2.0 (grain) 5.0 (forage)	1.0 0.5	Do not apply more than once per season. Do not graze or cut for forage within 21 days after application. Do not graze or cut for forage within 21 days after application. Do not apply more than twice per season.
Soybeans	0.8	0.75 (spray) 1.2 (dust)	7 days. Do not feed teated forage to livestock.
Spinach	0.8	0.5 (spray) 1.2 (dust)	21 days.
Squash Summer	0.8	1.0	7 days.
Strawberries	0.8	0.5 (spray) 1.2 (dust)	3 days.
Sugar beets	5.0 (tops & roots)	1.0 1.0	14 days. Apply to furrow at time of seeding.

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CDEC

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. Actual/A.	
Cauliflower (Cont.)		8.0	immediately after transplanting and followed by irrigation.
Celery		6.0	Post-transplanting. Do not apply later than 3 weeks after setting plants in field.
		8.0	Preplanting, or just prior to setting plants in fields.
Chicory		4.0	Preemergence application.
Collards		4.0	Preemergence application.
Corn			
Field		6.0	Preemergence application.
Pop			
Sweet			
Cucumber		4.0	Preemergence application immediately after seeding.
Endive		4.0	Preemergence application.
Escarole		4.0	Preemergence application.
Hanover Salad		4.0	Preemergence application.
Kale		4.0	Preemergence application.
Lettuce		6.0	Preemergence application.
		8.0	Preplanting, or just prior to setting plants in fields.
Mustard Greens		4.0	Preemergence application.
Okra		4.0	Preemergence application.
Potatoes		3.0	Preemergence application immediately after planting. Use in combination with CDAA, or

USDA Summary of Registered Agricultural Pesticide Chemical Uses

CDEC

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Potatoes (cont.)		3.0	Postemergence application at time of last hilling. Use in combination with CDAA.
Soybeans		4.0	Preemergence application.
Spinach		4.0	Preemergence application.
		3.0	Postemergence application within 30 days after emergence. Repeat application in 30 days. Do not apply to muck soils. Do not apply within 30 days of harvest.
Tomatoes		4.0	Preemergence application.
		6.0	Posttransplanting; direct application followed by irrigation.
Turnips		4.0	Preemergence application.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

CHLORDANE*

PRINCIPAL FORMULATIONS: Emulsifiable concentrates containing 2, 4, or 6 lbs. per gallon; 40% wettable powder; 5%-10% dusts or granular formulations; 0.5%-2% fertilizer mixtures; 2%-3% pressurized sprays

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. Actual/A.	
Alfalfa		2.0	Do not feed treated forage to dairy animals or animals being finished for slaughter.
		0.4 oz./colony	Ant mound treatment.
Apples	0.3	8.0	30 days.
Apricots	0.3	8.0	30 days.
Asparagus		0.5	Post-cutting use only.
Barley		3.0	Do not apply after heads begin to form. Do not graze treated fields. No restriction on use of grain.
Beans	0.3	2.0	Do not apply to green or snap beans after pods begin to form.
Beans			
Seed		2.0 oz./bu.	Do not use as food or feed.
Beets	0.3	2.0	Do not apply after seedling stage if tops are to be used as food.
Blackberries	0.3	2.0	Apply before fruit starts to form or after harvest.
Blackeyed Peas	0.3	2.0	Do not apply after pods start to form.
Blackeyed Peas			
Seed		2.0 oz./bu.	Do not use as food or feed.
Blueberries	0.3	2.0	Apply before fruit starts to form or after harvest.

* 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-4,7-methanoindane

USDA Summary of Registered Agricultural Pesticide Chemical Uses

CHLORDANE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Broccoli	0.3	2.0	Do not apply after edible parts start to form.
Brussels sprouts	0.3	2.0	Do not apply after edible parts start to form.
Bush & Vine Fruits:			
Blackberries	0.3	10.0	Preplanting soil application or when no fruit is present.
Blueberries	0.3		
Boysenberries	0.3		
Cranberries		1.0	Wet or dry bait formulations.
Currants			
Dewberries	0.3		
Gooseberries			
Grapes	0.3		
Huckleberries	0.3		
Loganberries	0.3		
Raspberries	0.3		
Strawberries	0.3		
Youngberries			
Cabbage	0.3	2.0	Do not apply after edible parts start to form.
Carrots	0.3	2.0	No time limitations.
Cauliflower	0.3	2.0	Do not apply after edible parts start to form.
Celery	0.3	2.0	Do not apply after plants are half grown or start to bunch.
Citrus Fruits:			
Grapefruit	0.3	10.0	14 days. Apply to trunk and larger branches and to outer foliage only at drip line.
Kumquats	0.3		
Lemons	0.3		
Limes	0.3		
Oranges	0.3	10.0	Soil treatment. Apply when no fruit is present.
Tangerines	0.3		
Tangeloes	0.3	1.0	Wet or dry bait formulations.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

CHLORDANE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Clover		lbs. actual/A.	
		2.0	Do not feed treated forage to dairy animals or animals being finished for slaughter. Do not apply to forage to be sold commercially or shipped interstate.
Collards	0.3	0.4 oz./colony	Ant mound treatment.
		2.0	Do not apply after edible parts start to form.
Corn	0.3	2.0	Do not feed treated forage to dairy animals or animals being finished for slaughter. No restriction on the use of grain.
Corn (sweet)	0.3	1.5	Apply primarily to silks. Do not feed treated forage to dairy animals or animals being finished for slaughter. No restriction on the use of the corn as human food.
Corn (seed)		2.0 oz./bu.	Do not use as food or feed.
Cotton		3.5	Do not apply after bolls open. Do not graze treated fields by dairy animals or animals being finished for slaughter.
Cotton (seed)		2.0 oz./bu.	Do not use as food or feed.
Cowpeas		2.0	Do not feed treated forage to dairy animals or animals being finished for slaughter.
Cowpeas (seed)		2.0 oz./bu.	Do not use as food or feed.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

CHLORDANE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. Actual/A.	
Cucurbits	0.3	2.5	Dust or spray. Do not apply after edible parts start to form. May be injurious to some varieties.
Deciduous Fruits & Nuts:			
Almonds		10.0	Soil application when no fruit is present.
Apples	0.3		
Apricots	0.3		
Cashews		1.0	Wet or dry bait formulations.
Cherries	0.3		
Chestnuts			
Dates			
Figs			
Filberts			
Hazelnuts			
Hickory Nuts			
Nectarines	0.3		
Olives			
Peaches	0.3		
Pears	0.3		
Pecans			
Persimmons			
Plums	0.3		
Pomegranate			
Prunes	0.3		
Quinces	0.3		
Walnuts			
Eggplants	0.3	2.0	Dust or spray. Do not apply after edible parts start to form.
Field, Fiber, and Forage Crops:			
Alfalfa		10.0	Preplanting soil application.
Barley			
Birdsfoot		1.0	Wet or dry bait formulations.
Trefoil			
Buckwheat			
Clover			
Corn			

USDA Summary of Registered Agricultural Pesticide Chemical Uses

CHLORDANE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Vegetables:			
Asparagus		10.0	Preplanting soil application or at time of planting or transplanting.
Beans	0.3		
Beets	0.3		
Blackeyed peas	0.3	1.0	Wet or dry bait formulations. Do not contaminate edible parts.
Broccoli	0.3		
Brussels sprouts	0.3		
Cabbage	0.3		
Cantaloupes	0.3		
Carrots	0.3		
Cauliflower	0.3		
Celery	0.3		
Collards	0.3		
Corn	0.3		
Cowpeas	0.3		
Cucumbers	0.3		
Eggplants	0.3		
Endive			
Garlic			
Horseradish			
Kale	0.3		
Kohlrabi	0.3		
Leeks			
Lettuce	0.3		
Melons	0.3		
Mustard greens			
Okra	0.3		
Onions	0.3		
Parsnips			
Peas	0.3		
Peppers	0.3		
Pimentoes	0.3		
Pumpkins			
Radishes	0.3		
Rutabagas	0.3		
Salsify			
Shallots			
Spinach			
Squash (summer)	0.3		
Squash (winter)	0.3		

USDA Summary of Registered Agricultural Pesticide Chemical Uses

CHLORDANE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. Actual/A.	
Vegetables: (Cont.)			
Sweet Potatoes	0.3	10.0	Preplanting soil application or at time of planting or transplanting.
Swiss Chard			
Tomatoes	0.3		
Turnips	0.3	1.0	Wet or dry bait formulations. Do not contaminate edible parts.
Watermelons	0.3		
Velvet Beans		2.0	Do not feed treated vines and pods to dairy animals or animals being finished for slaughter.
Vetch		2.0	Do not feed treated forage to dairy animals or animals being finished for slaughter.
Wheat		3.0	Do not apply after heads start to form. Do not graze treated forage. No restriction on use of grain.
Wheat			
Seed		2.0 oz./bu.	Do not use as food or feed.
Agricultural Premises:			
Animal Pens		3.0% in oil or water	Use as a residual surface spray. Do not apply to feedstuffs. Do not contaminate feed or drinking water.
Barns			
Boxes			
Cartons			
Empty Storage Bins		6.0%	Dust. Thorough application to interior and exterior surfaces. Do not apply to feedstuffs. Do not contaminate feed or drinking water.
Sacks			
Storage Crates (excluding dairy barns and poultry houses)			

USDA Summary of Registered Agricultural Pesticide Chemical Uses

CHLORDANE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. Actual/A.	
Outdoor Treatment:			
Ditch Banks		1.5	Dust or spray. Do not contaminate food or feed crops.
Field Borders			
Roadsides		1.0	Apply by fogging machine. Do not contaminate food or feed crops.
Vacant Land		3.0	Soil application. Do not feed forage to dairy animals or animals being finished for slaughter.
Ant Mounds		0.5% in water	Thoroughly saturate mounds. (As much as 5 gallons for large colonies.) Do not contaminate food or feed crops.
		1.5	Dust. Apply thoroughly to mounds. Do not contaminate food or feed crops.

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CHLORINATED BENZENES CONTAINING 1,2,3,4-TETRACHLOROBENZENE;
1,2,4-TRICHLOROBENZENE; AND PENTACHLOROBENZENE

PRINCIPAL FORMULATIONS: Invertebrate Animal Poison or Repellent, 40% Granular

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Oyster Grounds		lbs. act./A. 660	For use in New York and Connecticut waters only. Transplant oysters to a suitable untreated area at least 120 days before harvesting.

*Polystream

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USDA Summary of Registered Agricultural Pesticide Chemical Uses

2-CHLORO-1-(2,4-DICHLOROPHENYL) VINYL DIETHYL PHOSPHATE

PRINCIPAL FORMULATIONS: 10% granular

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Corn		lbs. actual/A.	
Field		2.0	Soil application to furrow at time of planting.
		1.0	Band soil application at time of last cultivation.

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CHLOROBENZILATE*

PRINCIPAL FORMULATIONS: 25% emulsifiable concentrate; 25% wettable powder;
4% dust; 10% pressurized spray

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. Actual/A.	
Almonds		3.0	21 days.
Apples	5	5.0	14 days.
Cantaloupes	5	1.6	No time limitations.
Cherries		4.0	Post-harvest application only.
Cotton		1.0	Do not apply after bolls open. Do not graze livestock in treated fields. Do not feed gin waste to livestock.
Grapefruits	5	2.5	No time limitations.
Lemons	5	7.5	No time limitations.
Oranges	5	5.0	No time limitations.
Peaches		1.5	30 days.
Pears	5	5.0	7 days.
Tangerines	5	2.5	No time limitations.
Walnuts		5.0	Do not apply after husks begin to split.

*Ethyl 4,4'-dichlorobenzilate

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2-CHLORO-4,6-BIS (ISOPROPYLAMINO)-s-TRIAZINE*

PRINCIPAL FORMULATIONS: 80% wettable powder

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Sorghum (Milo, Sweet)		lbs. actual/A. 4.0	Preemergence application at time of planting or immediately after. Do not plant treated fields to any crop other than sorghum within 18 months after treatment. Do not apply to sandy soil.

*Proprietary name: "Propazine"

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CHLOROFORM

PRINCIPAL FORMULATIONS: Fumigant mixture containing 73.2% chloroform and 26.8% carbon disulfide

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Commodity Fumigation			
Grain:			
Barley	Exempt	8.0 gals./	Apply to grain in storage. No time limitations.
Corn	Exempt	1000 bu.	
Oats	Exempt		
Popcorn	Exempt		
Rice	Exempt		
Rye	Exempt		
Sorghum	Exempt		
Wheat	Exempt		
Animals:			
Beef Cattle		50.0%	Formulated with other ingredients. Apply locally to wounds, cuts, scratches, etc. Repeat as necessary until wounds heal. Apply in and around ears for tick control.
Dairy Cattle		screw-worm	
Goats		treatment	
Sheep			
Swine			

USDA Summary of Registered Agricultural Pesticide Chemical Uses

2-CHLORO-N-ISOPROPYL ACETAMILIDE

PRINCIPAL FORMULATIONS: 65% wettable powder

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Corn (field)		lbs. actual/A. 5.0	Preemergence application. Do not cut immature plants for silage. Do not graze treated area or feed forage to livestock.
Soybeans (seed crop)		5.0	Preemergence application. Do not cut immature plants for silage. Do not graze treated area or feed forage to livestock. Do not use seed for food, feed, or oil purposes.



USDA Summary of Registered Agricultural Pesticide Chemical Uses

CHLOROMETHOXYPROPYL MERCURIC ACETATE

PRINCIPAL FORMULATIONS: 3.6% liquid mix; 9.6% concentrate

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		fl.oz.act./bu.	
Oats		0.027	Seed treatment only. Do not use treated seed for food, feed, or oil.
Wheat		0.027	Seed treatment only. Do not use treated seed for food, feed, or oil.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

(3-CHLORO-2-METHYL-p-VALEROTOLUIDIDE) 2-METHYLPANTANAMIDE

PRINCIPAL FORMULATIONS: 46% emulsion concentrate containing 4 lbs./gal.

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Tomatoes		lbs. actual/A. 4.0	Preemergence application 2-3 days before crop emerges. or 30 days postemergence application when crop is 6 or more inches tall. or 30 days posttransplanting application 2 or more weeks after setting.

Coined common name: "Solan"
 Issued: 10-1-65

USDA Summary of Registered Agricultural Pesticide Chemical Uses

1-CHLORO-2-NITROPROPANE

PRINCIPAL FORMULATIONS: 44.55% emulsifiable concentrate containing 4 lbs./gal.

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Beets (table)		1.0	Pacific Northwest only. In furrow on 24 inch row spacing at planting time.
Cotton		2.0	Soil application at time of planting.
Cucumbers		1.0	California heavy soils only. In furrow on 80 inch spacings at planting time.
Melons		1.0	California heavy soils only. In furrow on 80 inch spacings at planting time.
Peas		4.0	Pacific Northwest only. In furrow on 7 inch row spacings at planting time.

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3-[p-(p-CHLOROPHENOXY)-PHENYL]-1,1-DIMETHYLUREA

PRINCIPAL FORMULATIONS: 50% wettable powder

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Soybeans (seed crop)		lbs. actual/A. 4.0	Preemergence application or Postemergence application up to layby as a directed spray to weeds less than 2 inches tall. Do not use seed for food, feed, or oil purposes. Do not graze treated area or feed treated forage to livestock.

Proprietary name: Tenoran
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2-(3-CHLOROPHENOXY)-PROPIONIC ACID

PRINCIPAL FORMULATIONS: 8.33% wettable powder

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Peaches		grams acid equiv./A. 566 gm./A. in 300 ppm spray	Chemical thinning. Apply when seed is soft (1/4-3/8 inches long).
Plum (Duarte)		57 gm./A. in 50 ppm spray	Chemical thinning. Apply 7-14 days after full bloom.
Prune (French)		57 gm./A. in 50 ppm spray	Chemical thinning. Apply 7-14 days after full bloom.

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p-CHLOROPHENYL BENZENE SULFONATE*

PRINCIPAL FORMULATIONS: 50% wettable powder

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. Actual/A	
Apples		4.0	Single application at pink or pre-pink stage.
Peaches		4.0	Apply during prebloom season only.
Pears		4.0	Single application at pink or pre-pink stage.

*Proprietary Name: "Fenson"

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USDA Summary of Registered Agricultural Pesticide Chemical Uses

COPPER (Ammoniacal)

PRINCIPAL FORMULATIONS: 3.25% liquid; 10% soluble paste

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Apples		0.4	No time limitations.
Beans		0.3	No time limitations.
Cantaloupes		0.4	No time limitations.
Carrots		0.4	No time limitations.
Celery		0.2	No time limitations.
Citrus		0.4	No time limitations.
Cucumbers		0.6	No time limitations.
Currants		0.3	No time limitations.
Gooseberries		0.4	No time limitations.
Grapes		0.3	No time limitations.
Melons		0.4	No time limitations.
Peaches		0.4	No time limitations.
Pears		0.4	No time limitations.
Peas		0.3	No time limitations.
Potatoes		0.3	No time limitations.
Quinces		0.4	No time limitations.
Squash		0.4	No time limitations.
Sugarbeets		0.3	No time limitations.
Tomatoes		0.3	No time limitations.

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USDA Summary of Registered Agricultural Pesticide Chemical Uses

COPPER ARSENATE

PRINCIPAL FORMULATIONS: Customarily marketed as 91% wettable powder

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
	(as combined As ₂ O ₃)	lbs. actual/A.	
Almonds		32.0	Do not apply after petal fall.
Apricots		64.0	Do not apply after petal fall.
Beans (dried)		15.0	No time limitations.
Beans (green or snap)		15.0	Do not apply after edible parts start to form. Do not feed any treated plant parts to livestock.
Broccoli		8.0	Do not apply after edible parts start to form.
Brussel sprouts	3.5	8.0	Do not apply after edible parts start to form.
Cabbage	3.5	8.0	Do not apply after edible parts start to form.
Carrots	3.5	8.0	No time limitations.
Cauliflower	3.5	8.0	Do not apply after curd starts to form.
Celery		9.0	No time limitations.
Cucumbers		7.3	No time limitations.
Cucurbits		7.0	No time limitations.
Grapefruit		4.6	Apply 1-3 weeks after bloom. Treatment may be repeated in summer scabicide sprays.
Kohlrabi	3.5	8.0	Do not apply after edible parts start to form.
Pears		18.0	Do not apply after petal fall.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

COPPER ARSENATE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
	(as combined As ₂ O ₃)	lbs. actual/A.	
Potatoes (foliage)		25.0	No time limitations.
Tomatoes	3.5	15.0	No time limitations.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

COPPER - BASIC COPPER SULFATE AND CHLORIDES

PRINCIPAL FORMULATIONS: 50% wettable powder; 6%, 7%, and 10% dusts

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Almonds	Exempt	3.0	Preblossom to petal fall.
Apples	Exempt	3.5	No time limitations.
Apricots	Exempt	3.0	Preblossom to petal fall.
Beans	Exempt	2.4	No time limitations.
Broccoli	Exempt	1.8	No time limitations.
Brussels sprouts	Exempt	1.8	No time limitations.
Cabbage	Exempt	1.8	No time limitations.
Cantaloupe	Exempt	2.1	No time limitations.
Carrot	Exempt	2.0	No time limitations.
Cauliflower	Exempt	2.0	No time limitations.
Celery	Exempt	2.4	No time limitations.
Cherries	Exempt	3.0	No time limitations.
Citrus:			
Grapefruit	Exempt	2.5	Do not apply after fruit is 3/4" in diameter.
Kumquats	Exempt		
Lemons	Exempt		
Limes	Exempt		
Oranges	Exempt		
Tangerines	Exempt		
Tangeloes	Exempt		
Cucumbers	Exempt	3.0	No time limitations.
Cucurbits	Exempt	3.0	No time limitations.
Filberts	Exempt	3.0	No time limitations.
Grapes	Exempt	4.5	No time limitations.

COPPER NAPHTHENATE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Field Boxes (for fruits and vege- tables)		2.0% solution	Dip for 1/2 minute or apply with brush or spray.
Empty bee hives		2.0% solution	Dip for 1/2 minute or apply with brush or spray.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

COPPER OLEATE

PRINCIPAL FORMULATIONS: 2%, 4%, 10%, 15%, 20%, and 25% liquids

USE	TOLERANCE (ppm)	DOSAGE lbs. actual/A.	LIMITATIONS
Almonds	Exempt	5.8	Apply before husks open. Do not feed husks to livestock.
Apples	Exempt	3.6	Dormant to petal fall only.
Apricots	Exempt	3.6	Delayed dormant to petal fall.
Beans	Exempt	1.1	No time limitations.
Cabbage	Exempt	1.1	No time limitations.
Cantaloupe	Exempt	1.5	No time limitations.
Celery	Exempt	1.5	No time limitations.
Cherries	Exempt	3.6	No time limitations.
Citrus: Grapefruit	Exempt	9.3	Do not apply within 1 day of harvest.
Lemons	Exempt		
Oranges	Exempt		
Cole Crops	Exempt	1.1	No time limitations.
Cucumbers	Exempt	1.5	No time limitations.
Cucurbits	Exempt	1.5	No time limitations.
Grapes	Exempt	1.8	Apply when new growth is 1" long and after grapes are set.
Lettuce	Exempt	1.2	No time limitations.
Melons	Exempt	1.5	No time limitations.
Nectarines	Exempt	3.6	Dormant application only.
Onions	Exempt	1.1	No time limitations.
Peach	Exempt	3.6	Dormant to pop corn stage. (Cont'd)

USDA Summary of Registered Agricultural Pesticide Chemical Uses

COPPER RESINATE (20%) PLUS PHENYL MERCURY SALICYLATE (2%)

PRINCIPAL FORMULATIONS: Mixture of technical materials with inert diluents

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Wheat		0.5 oz./bu.	Seed treatment only. Do not use treated seed for food or feed.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

COPPER SALTS OF FATTY AND ROSIN ACIDS

PRINCIPAL FORMULATIONS: 48% liquid containing 4% copper. A mixture of copper oleate, copper linoleate, and copper abietate

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Cantaloupes	Exempt	1/2 gal./A.	No time limitation.
Carrots	Exempt	3 qts./A.	No time limitations. North Central states only.
Citrus (all)	Exempt	2 gals./A.	Aircraft application 3 weeks after petal fall.
		10 gals./A.	Ground equipment application 3 weeks after petal fall.
Cucumbers	Exempt	1/2 gal./A.	No time limitation.
Peanuts	Exempt	1 gal./A.	No time limitation.
Peppers	Exempt	3 qts./A.	No time limitations. North Central states only.
Pumpkins	Exempt	1/2 gal./A.	No time limitation.
Squash	Exempt	1/2 gal./A.	No time limitation.
Tomatoes (greenhouse)	Exempt	1.0 oz. of 20% aerosol/ 3000 cu.ft.	Fog application. No time limitations.
Watermelon	Exempt	1/2 gal./A.	No time limitation.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

COPPER SULFATE (Basic)

PRINCIPAL FORMULATIONS: 12.75%, 13.0%, 19.0%, 26.0%, 34.0%, 35.0%, 53.0% wettable powders
6.0%, 6.5%, 7.0%, 8.0%, and 26.0% dusts

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Almonds	Exempt	21.5	Swelling bud and popcorn stage.
Apples	Exempt	6.4	No time limitations.
Apricots	Exempt	13.5	Red bud or prejacket sprays.
		2.6	No time limitations.
Avocados	Exempt	16.0	140 days after bloom.
Beans	Exempt	3.2	No time limitations.
Beets	Exempt	4.8	No time limitations.
Blackberries	Exempt	2.5	No time limitations.
Blueberries	Exempt	1.4	May be applied close to harvest.
Boysenberries	Exempt	1.4	May be applied close to harvest.
Brambles	Exempt	2.6	No time limitations.
Broccoli	Exempt	4.8	No time limitations.
Brussels sprouts	Exempt	3.5	No time limitations.
Cabbage	Exempt	5.2	No time limitations.
Cantaloupe	Exempt	5.3	No time limitations.
Carrots	Exempt	4.0	No time limitations.
Cauliflower	Exempt	3.5	No time limitations.
Celery	Exempt	5.2	No time limitations.
Cherries	Exempt	13.5	No time limitations.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

COPPER SULFATE (Basic)

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Citrus:			
Grapefruit	Exempt	5.1	Apply just before spring growth starts and repeat when fruit is about marble size.
Kumquats	Exempt		
Lemons	Exempt		
Limes	Exempt	4.0	
Oranges	Exempt		No time limitations.
Tangerines	Exempt		
Tangeloes	Exempt	15.3	
Cole Crops	Exempt	3.2	No time limitations.
Cranberries	Exempt	1.4	May be applied close to harvest.
Cucumbers	Exempt	5.3	No time limitations.
Cucurbits	Exempt	5.3	No time limitations.
Currants	Exempt	2.6	No time limitations.
Dewberries	Exempt	1.4	May be applied close to harvest.
Eggplants	Exempt	5.2	No time limitations.
Endive	Exempt	1.7	No time limitations.
Garlic	Exempt	1.5	No time limitations.
Gooseberries	Exempt	2.6	No time limitations.
Grapes	Exempt	3.3	No time limitations.
Hops	Exempt	5.2	No time limitations.
Huckleberries	Exempt	1.4	May be applied close to harvest.
Lettuce	Exempt	3.2	No time limitations.
Loganberries	Exempt	1.4	May be applied close to harvest.
Loquats	Exempt	8.0	No time limitations.
Mangoes	Exempt	8.0	84 days after bloom.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

COPPER SULFATE (Basic)

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Melons	Exempt	5.3	No time limitations.
Mint	Exempt	2.8	No time limitations.
Nectarines	Exempt	13.5	November 15-30. In spring before buds swell. In full pink.
Onions	Exempt	5.2	No time limitations.
Papayas	Exempt	8.0	No time limitations.
Peaches	Exempt	13.5	November 15-30. In spring before buds swell. In full pink.
		2.6	No time limitations.
Peanuts	Exempt	6.4	No time limitations.
Pears	Exempt	8.0	No time limitations.
Peas	Exempt	5.2	No time limitations.
Pecans	Exempt	20.0	No time limitations.
Peppers	Exempt	5.2	No time limitations.
Plums	Exempt	6.4	Green bud stage and popcorn stage.
		13.25	No time limitations.
Potatoes	Exempt	6.4	No time limitations.
Prunes	Exempt	6.4	Green bud stage and popcorn stage.
		13.25	No time limitations.
Radishes	Exempt	3.2	No time limitations.
Raspberries	Exempt	1.0	No time limitations.
Rice	Exempt	15.0	Apply as needed after field has been flooded.
Soybeans	Exempt	5.2	No time limitations.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

COPPER SULFATE (Basic)

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Spinach	Exempt	3.2	No time limitations.
Squash	Exempt	5.3	No time limitations.
Strawberries	Exempt	4.0	No time limitations.
Sugar beets	Exempt	6.4	No time limitations.
Tomatoes	Exempt	6.4	No time limitations.
Walnuts	Exempt	26.8	No time limitations.
Watermelons	Exempt	5.3	No time limitations.
Wheat		2.1 oz./bu.	Seed treatment only. Do not use treated seed for food or feed.
Youngberries	Exempt	1.4	May be applied close to harvest.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

COPPER-TETRA COPPER CALCIUM OXYCHLORIDE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Parsnips	Exempt	2.7	No time limitations.
Peaches	Exempt	22.0	Apply as a dormant spray in the fall and before buds break in spring.
		12.3	Apply during bloom period only.
Peanuts	Exempt	1.2	No time limitations.
Pears	Exempt	22.5	No time limitations.
Peppers	Exempt	2.5	No time limitations.
Plums	Exempt	12.3	Apply during bloom period only.
Potatoes	Exempt	2.5	No time limitations.
Prunes	Exempt	12.3	Apply during bloom period only.
Squash	Exempt	7.2	No time limitations.
Strawberries	Exempt	2.4	No time limitations.
Sugar Beets	Exempt	2.4	No time limitations.
Tomatoes	Exempt	2.3	No time limitations.
Walnuts	Exempt	12.0	Early prebloom applications, 3-6 treatments at 7-day intervals.
Watermelons	Exempt	7.2	No time limitations.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

COPPER-ZINC CHROMATE COMPLEX

PRINCIPAL FORMULATIONS: 20.0%, 35.6%, 47.5%, 89.0% and 95.0% wettable powders
3.0%, 5.7%, 6.0% and 8.0% dusts

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Avocados	Exempt	19.0	No time limitations.
Beets (table)	Exempt	2.0	No time limitations.
Cantaloupes	Exempt	3.0	No time limitations.
Carrots	Exempt	3.0	No time limitations.
Celery	Exempt	3.0	No time limitations.
Citrus:			
Grapefruit	Exempt	9.5	No time limitations.
Kumquat	Exempt		
Lemons	Exempt		
Limes	Exempt		
Oranges	Exempt		
Tangerines	Exempt		
Tangeloes	Exempt		
Cucumbers	Exempt	3.0	No time limitations.
Cucurbits	Exempt	3.0	No time limitations.
Grapes	Exempt	1.9	No time limitations.
Melons	Exempt	3.0	No time limitations.
Peanuts	Exempt	1.9	No time limitations.
Peppers	Exempt	3.8	No time limitations.
Potatoes	Exempt	3.78	No time limitations.
Squash	Exempt	3.0	No time limitations.
Strawberries	Exempt	1.8	No time limitations.
Sugar beets	Exempt	3.0	No time limitations.
Tomatoes	Exempt	6.8	No time limitations.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

CREOSOTE

PRINCIPAL FORMULATIONS: Technical material, or formulated with mineral oil

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Potatoes		1 gal./50 gals.	Disinfect potato storage bins and other equipment used in potato production.
Animals:			
Beef Cattle		2.5%	
Goats		Dust	Apply to infested area and rub into hair or feathers until dust comes in contact with skin. Usually formulated with other ingredients.
Poultry			
Sheep			
Swine			
Agricultural Premises:			
Animal Sleeping Quarters		2.5%	Thoroughly treat all surfaces, especially where insects hide or congregate. Usually formulated with other ingredients.
Barns		Dust	
Hog Pens			
Sheep Folds		98.0%	Apply to interior surfaces of poultry houses or animal sleeping quarters by spraying or brushing.
Etc.		in oil	

USDA Summary of Registered Agricultural Pesticide Chemical Uses

CRYOLITE*

PRINCIPAL FORMULATIONS: Pure substance either from natural sources or from synthetic manufacture. Finished formulations are ordinarily in the form of dusts ranging from about 20% to 100%. Sprays are rarely encountered.

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
	(p.p.m. of combined fluorine)	lbs. actual/A.	
Almonds		80.0	No time limitations.
Apples	7	80.0	Remove excess residues by washing, brushing, or other effective means.
Apricots	7	80.0	Remove excess residues by washing, brushing, or other effective means.
Artichokes (including Jerusalem)		50.0	Remove excess residues by washing, brushing, or other effective means.
Asparagus		50.0	Do not apply during the cutting season.
Beans			
Dry	7	50.0	Remove excess residues by washing, brushing, or other effective means.
Green			
Lima			
Snap			
Beets (including tops)	7	50.0	Do not apply after the seedling stage if tops are to be used for food. Otherwise, remove excess residues by washing, brushing, or other effective means.
Blackberries	7	60.0	Do not apply after fruit starts to form.
Blackeyed peas	7	50.0	Remove residues by washing, brushing, or other effective means.
Blueberries	7	50.0	Remove excess residues by washing, brushing, or other effective means.
Broccoli	7	50.0	Do not apply after the edible parts start to form.

*Sodium fluoaluminate
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CUPROUS OXIDE

PRINCIPAL FORMULATIONS: 25.0% and 90.0% powder; 4.5%, 8.3% and 9.0% dusts
76.0% liquid

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Almonds	Exempt	7.2	Apply in popcorn stage and repeat when trees are in half bloom.
Apricots	Exempt	4.5	Apply in late fall and repeat in spring.
Bananas	Exempt	4.5	No time limitations.
Beans	Exempt	2.0	Apply at 7-10 day intervals (close to harvest).
Beets	Exempt	2.0	Apply at 7-10 day intervals (close to harvest).
Blackberries	Exempt	2.3	No time limitations.
Broccoli	Exempt	2.9	No time limitations.
Brussels sprouts	Exempt	2.9	No time limitations.
Cabbage	Exempt	2.9	No time limitations.
Cantaloupes	Exempt	3.0	No time limitations.
Carrots	Exempt	2.1	No time limitations.
Cauliflower	Exempt	3.4	No time limitations.
Celery	Exempt	5.0	No time limitations.
Cherries	Exempt	4.5	Begin application 2 weeks after shuck shed - 1 week later and 7-10 days later.
Citrus	Exempt	8.0	Complete spray schedule (close to harvest)
Coffee	Exempt	1.25 lbs. per 100 gals.	No time limitations.
Collards	Exempt	4.1	No time limitations.
Cucumbers	Exempt	3.5	No time limitations.

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Replaces page issued 2-10-65

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CUPROUS OXIDE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Currants	Exempt	2.3	Apply just after blossoming. Postharvest application also.
Eggplants	Exempt	3.5	No time limitations.
Garlic	Exempt	2.0	Apply at 7-10 day intervals (close to harvest).
Gooseberries	Exempt	2.3	No time limitations.
Grapes	Exempt	2.3	Start application before bloom and continue until grapes are about the size of buckshot.
Kale	Exempt	4.1	No time limitations.
Kohlrabi	Exempt	4.1	No time limitations.
Lettuce	Exempt	2.3	Apply at 7-10 day intervals (close to harvest).
Melons	Exempt	3.5	No time limitations.
Mustard	Exempt	4.1	No time limitations.
Okra	Exempt	4.1	No time limitations.
Onions	Exempt	2.0	Apply at 7-10 day intervals (close to harvest).
Peaches	Exempt	4.5	Apply in late fall and repeat in spring.
Peanuts	Exempt	2.0	No time limitations.
Peas	Exempt	3.0 oz./100 lbs. seed	Seed treatment only. Do not use treated seed for food or feed.
Peppers	Exempt	5.0	No time limitations.
Potatoes	Exempt	6.0	No time limitations.
Pumpkins	Exempt	3.0	No time limitations.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

CUPROUS OXIDE

USE	TOLERANCE (ppm)	DOSAGE lbs. actual/A.	LIMITATIONS
Raspberries	Exempt	2.3	No time limitations.
Spinach	Exempt	3.0	No time limitations.
Squash	Exempt	3.5	No time limitations.
Strawberries	Exempt	3.2	Apply before fruit begins to form and after harvest is completed.
Tomatoes	Exempt	6.0	No time limitations.
Turnips	Exempt	3.0	No time limitations.
Walnuts	Exempt	8.0	Begin at prebloom - 3 additional sprays during early formation of nuts.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

CYANAMIDE

PRINCIPAL FORMULATIONS: 46% and 60% liquid

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Cotton		lbs. actual/A. 5.0	Preharvest defoliation. Apply when 50% or more of bolls are open and 10-14 days before harvest.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

CYANO (METHYLMERCURI) GUANIDINE

PRINCIPAL FORMULATIONS: 0.6%, 2.2%, 3.7% and 6.3% liquids

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		oz. actual	
Apples		3.3/acre	Apply delayed dormant to petal fall.
Beans		0.097/100 lbs.	Seed treatment. Do not use treated seed for food, feed, or oil.
Corn (field)		0.077/100 lbs.	Seed treatment. Do not use treated seed for food, feed, or oil.
Corn (sweet)		0.097/100 lbs.	Seed treatment. Do not use treated seed for food, feed, or oil.
Cottonseed		0.25/acre	Soil and seed treatment in furrow at time of planting.
acid delinted		0.088/100 lbs.	Seed or planter box treatment. Do not use treated seed for food, feed, or oil.
machine delinted		0.088/100 lbs.	Seed or planter box treatment. Do not use treated seed for food, feed, or oil.
fuzzy		0.130/100 lbs.	Seed or planter box treatment. Do not use treated seed for food, feed, or oil.
Flax		0.037/bu.	Seed treatment. Do not use treated seed for food, feed, or oil.
Grain:			
Barley		0.018/bu.	Seed or planter box treatment. Do not use treated seed for food, feed, or oil.
Oats			
Rye			
Sorghum			
Wheat			
Peanuts		0.055/100 lbs.	Seed treatment. Do not use treated seed for food, feed, or oil.
Peas		0.097/100 lbs.	Seed treatment. Do not use treated seed for food, feed, or oil.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

CYANO (METHYLMERCURI) GUANIDINE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		oz. actual	
Rice		0.018/bu.	Seed treatment. Do not use treated seed for food, feed, or oil.
Safflower		0.046/100 lbs.	Seed treatment. Do not use treated seed for food, feed, or oil.
Soybeans		0.097/100 lbs.	Seed treatment. Do not use treated seed for food, feed, or oil.
Vegetable Plantbeds		0.024/35	Apply 1 1/2-2 pts. per sq. ft. as a preemergence soil drench and only when seedlings are to be transplanted to untreated soil.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

DALAPON*

PRINCIPAL FORMULATIONS: 85% wettable powder, as sodium salt

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Alfalfa		1.1	Apply to seedling crop underseeded in flax when flax is 1-6 in. high.
		2.2	Apply 4 weeks after seedling or when plants are 2-3 inches tall. Do not feed first year's growth to dairy animals or animals being finished for slaughter.
		6.0	Preplanting spring soil application. Follow by plowing 4 days later. Plant crop 4-5 weeks after plowing.
Apples	3	11.1	Apply 1 or 2 sprays when grass is 6-10 inches tall and after trees are at least 4 years old. Do not graze livestock on treated areas.
Apricots	1	11.1	Spray area within 3 ft. radius of tree trunk. Do not apply more than twice in any one season. Do not graze livestock on treated areas.
Asparagus	30	14.8	Apply as single application either before or after cutting season, or as split application with the first application before cutting or repeat 3-4 weeks later. During cutting season, apply immediately after cuttings. Later sprays should be directed under fern growth.
Bananas	5	11.1	Apply before grass heading stage; repeat at 4-6 week intervals. Do not apply more than 22.2 lbs. acid equivalent per year. Do not contaminate fruit, foliage, or young banana plants.

*2,2-dichloropropionic acid
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USDA Summary of Registered Agricultural Pesticide Chemical Uses

DALAPON

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Beans		6.0	Preplanting spring soil application. Follow by plowing 4 days later. Plant crop 4-5 weeks after plowing.
Beets		6.0	Preplanting spring soil application. Follow by plowing 4 days later. Plant crop 4-5 weeks after plowing.
Birdsfoot trefoil		1.1	Apply to seedling crop underseeded in flax when flax is 1-6 in. high.
		2.2	Apply 4 weeks after seeding or when plants are 2-3 inches tall. Do not feed first year's growth to dairy animals or animals being finished for slaughter.
		7.4	Preplant spring soil application. Apply in spring and follow by plowing. Plant crops 5-6 weeks after plowing.
Citrus Fruits:			
Grapefruit	5	3.0	Apply 3 times. Do not spray foliage.
Lime	5		
Orange	5	0.74 lbs./	Apply as spot treatment. Do not spray foliage.
Tangerine	5	20 gal. H ₂ O	
Coffee		7.4	Apply to grass as a directed spray. Repeat application in 4-6 weeks. Do not apply more than twice per year. Do not apply within 8 months of harvest.
Corn	10 grain & dry ear corn (kernels & cob)	7.4	Preplanting application when Johnson grass is 8-12 inches tall, followed by plowing 3 days later. Disc soil and plant corn 18 days after plowing.
	5 fodder & forage	1.5	Postemergence soil application as a directed spray on 14 inch band when corn is 8-20 inches tall, with rows spaced 40-42 inches apart. Keep spray off corn leaves by using leaf lifters. Do not use on corn grown for seed.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

DALAPON

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Corn (sweet)	5 fresh corn (kernels & cobs with husks removed)	lbs. actual/A.	
		1.5	Postemergence application as directed spray on 14 inch band when corn is 8-20 inches tall, with rows spaced 40-42 inches apart. Keep spray off corn leaves by using leaf lifters. Do not use on corn grown for seed.
Cotton	35 (cotton- seed)	3.7	Apply as directed spray at time of last cultivation.
		0.74 lbs. in 10 gals. water	Spot treatment. Apply as a directed spray to grasses. Three applications per season.
Cranberries	5	7.4	Preplanting application when Johnson grass is 8-12 inches tall, followed by plowing 3 days later. Disc soil and plant cotton 7-11 days after plowing.
		8.8	Spray treatment. Apply only in fall after cranberry harvest. Do not har- vest crop the year following treatment.
		1.5 (2 lbs./5 gals. water)	Swab treatment. Apply to grass above bushes, using no more than 2 applications Do not apply within 60 days of harvest.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

DALAPON

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Cranberries (contd.)	5	14.8	Ditch and shore treatments. Apply twice during June and July. Do not contaminate crop.
		7.4	Spray treatment. Apply in fall after cranberry harvest.
Cropland		22.2	Preplant fall soil application. Apply in fall and follow by spring plowing. Plant crops 4 weeks after plowing.
Flax	75 (flax- seed)	1.1	Apply when flax is 1-6 in. tall. May be used in flax underseeded to alfalfa, birdsfoot trefoil and sweet clover.
Grapes	3	14.8	Directed spray under grape trellis when grasses are actively growing. Repeat at 1/2 rate (7.4 lbs./acre) when grass reappears. Direct spray away from grape foliage.
Grass		7.4	Preplant spring soil application. Apply in spring and follow by plowing. Plant crops 5-6 weeks after plowing.
Macadamia nuts		9.0	Apply to ground cover under trees, before harvest and only after gleaning nuts during harvest. Do not apply directly to nuts. Do not apply more than 18 lbs./A./year.
Oats		7.4	Preplant spring soil application. Apply in spring and follow by plowing. Plant crops 5-6 weeks after plowing.
Pasture		7.4	Preplant application in spring or fall followed by plowing. Plant grass seeds 6 or more weeks after treatment.
Peaches	15	11.1	Spray area within 3 ft. radius of tree trunk. Do not apply more than three times in any one season. Do not graze livestock on treated areas. Do not apply within 30 days of harvest.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

DALAPON

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Pears	3	11.1	Apply 1 or 2 sprays when grass is 6-10 inches tall and after trees are at least 4 years old. Do not graze livestock on treated areas.
Peas	15 (peas & forage)	0.74	Apply after peas are 2-6 in. tall and have 4-6 nodes. Do not apply within 25 days of harvest. Do not feed treated pea vine hay to livestock.
Pineapple	3	7.4	Spot treatment. 1-6 month preharvest. Keep spray off pineapple foliage.
Plums	1	11.1	Spray area within 3 ft. radius of tree trunk. Do not apply more than twice in any one season. Do not graze livestock on treated areas.
Potatoes	10	11.1	Preplanting fall application in September or October. Follow by plowing 10-20 days later or delay until following spring. Plant crop in spring.
		7.4	Preemergence application. May be used in combination with DNBP amine.
		6.0	Preplanting spring application. Follow by plowing 4 days later. Plant crop immediately after plowing.
Prunes	1	11.1	Spray area within 3 ft. radius of tree trunk. Do not apply more than twice in any one season. Do not graze livestock on treated areas.
Sorghum		7.4	Preplanting application when Johnson grass is 8-12 inches tall, followed by plowing 3 days later. Disc soil and plant sorghum 18 days after plowing.
Soybeans		7.4	Preplanting application when Johnson grass is 8-12 inches tall, followed by plowing 3 days later. Disc soil and plant soybeans 18 days after plowing.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

DALAPON

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Sugar beets	5.0 (roots & tops)	3.0	Postemergence application as an overall spray from emergence to six-leaf stage.
		3.7	Postemergence application as a directed spray when beets are in seven-leaf stage to 14 inches tall. Use leaf lifting equipment to avoid wetting leaves. Do not apply more than 6 lbs. acid equivalent per acre per season.
		6.0	Postemergence application as a directed spray from emergence to six-leaf stage. Avoid spraying beet leaves.
Sugar cane		11.1	Preemergence or postemergence. Apply on drill row after grass is well developed.
Sweet clover		1.1	Apply to seedling crop underseeded in flax when flax is 1-6 in. high.
Wheat		7.4	Preplanting soil application in spring followed by plowing. Plant crop 5-6 weeks later.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

DDT*

PRINCIPAL FORMULATIONS: 50% wettable powder; 25% emulsifiable concentrate;
5% dust; 10% aerosols

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Alfalfa		10.0	Do not feed treated forage to dairy animals or animals being finished for slaughter. Do not apply to forage to be sold commercially or shipped interstate.
Almonds		8.0	Do not use treated hulls for food or feed.
Apples	7	18.0	30 days.
Apricots	7	12.0	42 days.
		16.0	42 days. Applied to trunks, crotches, and lower limbs.
Artichokes	7	2.5	Do not apply after edible parts start to form.
Asparagus	7	3.0	Do not apply during cutting season.
Avocado	7	12.0	30 days.
Barley		10.0	Do not apply after heads start to form. Do not feed treated forage to dairy animals or animals being finished for slaughter.
Barley (seed)		2.0 oz./bu.	Do not use as food or feed.
Beans	7	6.0	7 days for green or snap beans. No limitation on dry beans. Do not feed treated forage to dairy animals or animals being finished for slaughter.
Beans (seed)		2.0 oz./bu.	Do not use as food or feed.
Beets	7	6.0	Do not use treated tops for food or feed.
Blackberries	7	2.0	Do not apply after fruit starts to form.

*Dichloro diphenyl trichloroethane

USDA Summary of Registered Agricultural Pesticide Chemical Uses

DDVP

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Agricultural Premises: (cont.)		1.0% in oil or water	Apply as a fog or mist inside building at the rate of 1 pint per 8,000 cu. ft. Do not contaminate feed, drinking water, milk, or milking equipment. Do not apply in areas where animals have received direct applications of DDVP within 8 hours.
		0.5%	Apply as a spray to all exterior and interior surfaces at the rate of one quart per 1000 sq. ft. Apply to manure piles and garbage dumps at the rate of two quarts per 100 sq. ft. Do not contaminate water, feed, milk, or milking equipment.
Cattle feed lots Corrals Holding Pens Stockyards		5.0% in oil or water	Apply with a mist blower or other suitable equipment as an overall application at the rate of 0.2 lbs. actual per acre. Direct mist over entire area, thoroughly treat areas where flies congregate such as: fences, feeding areas and walls of buildings. Animals need not be removed during application. Avoid direct application to exposed feed and water. For bait spray, add 1 lb. of sugar per 5-10 gallons of spray.
Poultry Houses			
Poultry pens Poultry yards		2.5 lbs. of 0.5% DDVP on vermiculite carrier per 650 sq. ft.	Scatter on litter around feed troughs, dusting holes, nesting areas, and roosting areas. Repeat application after 6 days. For continued protection, repeat application every 30 days.
Special:			
Outdoor fogging		0.2% in oil	Formulated with other ingredients. Apply by fogging machines. Thoroughly treat premises.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

DDVP

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Mushroom Houses		0.5%	Apply to interior surfaces by brushing or spraying when no mushrooms are present.
		32 grams per 16,000 cubic feet	Apply by aerosol or hot pipe method 0.9 fluid oz. of emulsion concentration every four days. Repeat if necessary. Do not apply within 1 day of harvest.
		2 grams per 1,000 cubic feet	Apply by air blast fog generators only. Do not apply within one day of harvest.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

DECACHLOROCTAHYDRO-1,3,4-METHENO-2H-CYCLOBUTA [CD] PENTALENE-2-ONE

PRINCIPAL FORMULATIONS: 5% & 10% dust; 2% bait

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Bananas		2.0	Apply to soil surface in a 12 inch band adjacent to plant. Do not reapply within 6 months.
Bananas (seed beds only)		4.0	Apply to soil surface in a 12-inch wide circular band adjacent to the plant. Distribute evenly over area. Start application any time borers are a problem in seed bed. Do not reapply within 6 months.
Cabbage (Chinese)		1.0	Preplanting application at the rate of 50 lbs. of 2% bait per acre. Apply evenly with a mechanical spreader and disc into soil. Do not plant other crops on treated soil.
Corn (sweet)		1.0	Preplanting application at the rate of 50 lbs. of 2% bait per acre. Apply evenly with a mechanical spreader and disc into soil. Do not plant other crops on treated soil.
Cucumbers		1.0	Preplanting application at the rate of 50 lbs. of 2% bait per acre. Apply evenly with a mechanical spreader and disc into soil. Do not plant other crops on treated soil.
Endive		1.0	Preplanting application at the rate of 50 lbs. of 2% bait per acre. Apply evenly with a mechanical spreader and disc into soil. Do not plant other crops on treated soil.
Lettuce		1.0	Preplanting application at the rate of 50 lbs. of 2% bait per acre. Apply evenly with a mechanical spreader and disc into soil. Do not plant other crops on treated soil.

Proprietary name: Kepone
 Issued: 10-1-65

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USDA Summary of Registered Agricultural Pesticide Chemical Uses

DECACHLOROOCCTAHYDRO-1,3,4-METHENO-2H-CYCLOBUTA [CD] PENTALENE-2-ONE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Peppers		lbs. actual/A. 1.0	Preplanting application at the rate of 50 lbs. of 2% bait per acre. Apply evenly with a mechanical spreader and disc into soil. Do not plant other crops on treated soil.
Radishes		1.0	Preplanting application at the rate of 50 lbs. of 2% bait per acre. Apply evenly with a mechanical spreader and disc into soil. Do not plant other crops on treated soil.
Squash		1.0	Preplanting application at the rate of 50 lbs. of 2% bait per acre. Apply evenly with a mechanical spreader and disc into soil. Do not plant other crops on treated soil.
Sugarcane		2.0 (bait)	<p><u>Row</u> - place bait around cane in open furrow before sealing.</p> <p><u>Broadcast</u> - scatter bait evenly over area before planting. Disc into soil.</p> <p><u>Side dressing</u> - apply in a band beside the ratoons. Disc into soil.</p> <p>Do not plant crops other than sugarcane in treated soil.</p>
		3.25 (spray)	<p><u>Row</u> - spray over cane seed pieces and adjacent soil in open furrow.</p> <p><u>Broadcast</u> - apply evenly over areas and disc into soil.</p>
Tomatoes		1.0	Preplanting application at the rate of 50 lbs. of 2% bait per acre. Apply evenly with a mechanical spreader and disc into soil. Do not plant other crops on treated soil.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

DEMETON

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Cauliflower	0.75	0.5	21 days.
Celery	0.75	0.5	28 days.
Cherries		2.0	Only one application applied during prebloom or petal fall stages.
Clover	5 (on forage)	0.25	Only one application between cuttings. Do not apply within 21 days of harvest or grazing.
	12 (on hay)		
Cotton	0.75 in or on cotton-seed	0.38	21 days. Do not graze dairy or meat animals on treated fields. Do not feed gin waste to livestock.
Dewberries		1.5	Postharvest application only.
Eggplant		0.38	7 days. Do not apply more than twice per season.
Filberts		2.5	40 days.
Gooseberries		1.5	Postharvest application only.
Grapefruit	0.75	2.5	21 days.
Grapes	1.25	0.38	21 days.
Hops	1.25	0.5	21 days.
Lemons	0.75	2.5	21 days.
Lettuce	0.75	0.5	21 days.
Loganberries		1.5	Postharvest application only.
Muskmelons	0.75	0.38	21 days.
Nectarines		2.0	30 days. Not more than 3 applications per season.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

DEMETON

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Oats	0.75 (grain) 5.0 (forage and straw)	0.25	Do not apply more than twice per season. Allow 14 days between applications. Do not apply within 45 days of harvest for grain. Do not graze or cut for forage within 21 days after application.
Oranges	0.75	2.5	21 days.
Peaches	0.75	2.0	30 days. Not more than 3 applications per season.
Pears	0.75	2.25	21 days. Not more than 3 applications per season.
		3.0	21 days. Not more than 1 application per season.
Peas	0.75	0.5	21 days.
Pecans	0.75	1.0	21 days.
Pepper	0.75	0.38	3 days.
Pineapples		0.5 lbs./100 gals. of water	Preplanting treatment. Dip seed pieces thoroughly.
Plums	0.75	2.0	30 days. Not more than 3 applications per season.
		3.0	60 days. Do not apply more than twice per season.
Potatoes	0.75	0.5	21 days.
Prunes	0.75	2.0	30 days. Not more than 3 applications per season.
		3.0	60 days. Do not apply more than twice per season.
Raspberries		1.5	Postharvest application only.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

1,2-DIBROMO-3-CHLOROPROPANE + OTHER HALOGENATED C₃ COMPOUNDS

PRINCIPAL FORMULATIONS: 71% and 86% emulsifiable concentrate

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Apricots	5	34 - 86	Preplanting, at time of planting, or postplanting application to mineral soils. If preplanting application is made, wait 4-6 weeks before planting.
Bananas	125 (75 in pulp)	17 - 86	Preplanting or at time of planting application in rows to mineral soil.
		17 - 52	An initial postplanting application.
		17	Subsequent postplanting treatment not more than once in each 9-12 month period after initial application.
Beans (snap)	75	17 - 24	Preplanting, at time of planting or postplanting application to mineral soils. For preplant application wait 7-14 days before planting. Do not feed vines to livestock.
Blackberries	25	26 - 86	Preplanting, at time of planting or postplanting application to mineral soils. For preplanting use wait 7-14 days before planting. Do not apply within 48 days of harvest.
Boysenberries	25	26 - 86	Preplanting, at time of planting or postplanting application to mineral soils. For preplanting use wait 7-14 days before planting. Do not apply within 48 days of harvest.
Broccoli	50	17 - 24	Preplanting, at time of planting, or postplanting application to mineral soils. If preplanting application is made, wait 7-14 days before planting.
Brussels sprouts	50	17 - 24	Preplanting, at time of planting, or postplanting application to mineral soils. If preplanting application is made, wait 7-14 days before planting.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

1,2-DIBROMO-3-CHLOROPROPANE + OTHER HALOGENATED C₃ COMPOUNDS

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Cabbage	50	17 - 24	Preplanting, at time of planting, or postplanting application to mineral soils. If preplanting application is made, wait 7-14 days before planting.
Cantaloupes	50	17 - 26	Preplanting or at time of planting to mineral soils. For preplanting use wait 7-14 days before planting. No postplanting application.
Carrots	75	17 - 24	Preplanting, at time of planting, or postplanting to mineral soils. For preplanting use wait 7-14 days before planting. Do not feed plant parts to livestock.
Cauliflower	50	17 - 24	Preplanting, at time of planting, or postplanting application to mineral soils. If preplanting application is made, wait 7-14 days before planting.
Celery	75	60 (plant beds)	Preplanting, or postplanting drench in plant beds. If preplanting application is made, wait 7-14 days before seeding.
		17 - 24 (field)	Preplanting, at time of planting, or postplanting application to mineral soils. If preplanting application is made, wait 7-14 days before planting.
Citrus Fruits: (Western States only)			
Grapefruit	20	86.0	Do not apply more than once every 3 years.
Lemons	20		
Limes	20		
Oranges	20		
Tangerines	20		
Cotton	25 (in seed)	17 - 26	Preplanting, at time of planting, or postplanting application to mineral soils. For preplanting use wait 7-14 days before planting.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

1,2-DIBROMO-3-CHLOROPROPANE + OTHER HALOGENATED C₃ COMPOUNDS

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Cucumbers	25	17 - 26	Preplanting, or at time of planting to mineral soils. For preplanting use wait 7-14 days before planting. No postplanting application.
Dewberries	25	26 - 86	Preplanting, at time of planting, or postplanting to mineral soils. For preplanting use wait 7-14 days before planting. Do not apply within 48 days of harvest.
Eggplants	50	17 - 26	Preplanting, at time of planting, or postplanting application to mineral soils. For preplanting use wait 7-14 days before planting.
Endive (Escarole)	130	17 - 24	Preplanting, at time of planting, or postplanting application to mineral soils. For preplanting use wait 7-14 days before planting.
Figs	75	61	Preplanting, at time of planting, or postplanting application to mineral soils. For preplanting use wait 4-6 weeks before planting. Do not apply within one year of harvest.
Grapes	25	34 - 86	Preplanting, at time of planting, or postplanting application to mineral soils. If preplanting application is made, wait 4-6 weeks before planting.
Honeydew melons	50	17 - 26	Preplanting, or at time of planting application to mineral soils. For preplanting use wait 7-14 days before planting. No postplanting application.
Lettuce	130	17 - 24	Preplanting, at time of planting, or postplanting application to mineral soils. If preplanting application is made, wait 7-14 days before planting.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

1,2-DIBROMO-3-CHLOROPROPANE + OTHER HALOGENATED C₃ COMPOUNDS

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Loganberries	25	26 - 86	Preplanting, at time of planting or postplanting application to mineral soils. For preplanting use wait 7-14 days before planting. Do not apply within 48 days of harvest.
Muskmelons	50	17 - 26	Preplanting, or at time of planting application to mineral soils. For preplanting use wait 7-14 days before planting. No postplanting application.
Nectarines	5	34 - 86	Preplanting, at time of planting, or postplanting application to mineral soils. If preplanting application is made, wait 4-6 weeks before planting.
Okra	75	17 - 24	Preplanting, at time of planting, or postplanting application to mineral soils. If preplanting application is made, wait 7-14 days before planting.
Parsnips	75	17 - 24	Preplanting, at time of planting or postplanting to mineral soils. For preplanting use wait 7-14 days before planting. Do not feed plant parts to livestock.
Peaches	5	34 - 86	Preplanting, at time of planting, or postplanting application to mineral soils. If preplanting application is made, wait 4-6 weeks before planting.
Peppers	50	13 - 26 (direct seeded)	Preplanting overall. Wait 7-14 days before planting.
		5.7 - 8.6 (direct seeded)	Preplanting, at time of planting, or postplanting row application. For preplanting use wait 7-14 days before planting.
		13 (transplants)	Preplanting overall treatment. Allow 2 weeks between treatment and planting.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

2,6-DICHLOROBENZO NITRILE*

PRINCIPAL FORMULATIONS: 4% granular

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Apples		6.0	Apply to orchard floor when trees are of bearing age. Do not apply within 12 months of expected harvest. Do not graze livestock on treated areas.
Avocados		6.0	Apply to orchard floor when trees are of bearing age. Do not apply within 12 months of expected harvest. Do not graze livestock on treated areas.
Cherries		6.0	Apply to orchard floor when trees are of bearing age. Do not apply within 12 months of expected harvest. Do not graze livestock on treated areas.
Cranberries		4.0	Apply in early spring as a single application or as split applications 3-6 weeks apart. Do not apply after blooming starts. or Postharvest application in late fall.
Mangoes		6.0	Apply to orchard floor when trees are of bearing age. Do not apply within 12 months of expected harvest. Do not graze livestock on treated areas.
Peaches		6.0	Apply to orchard floor when trees are of bearing age. Do not apply within 12 months of expected harvest. Do not graze livestock on treated areas.
Pears		6.0	Apply to orchard floor when trees are of bearing age. Do not apply within 12 months of expected harvest. Do not graze livestock on treated areas.
Plums		6.0	Apply to orchard floor when trees are of bearing age. Do not apply within 12 months of expected harvest. Do not graze livestock on treated areas.

*Coined common name: Dichlobenil

Issued: 10-1-65

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USDA Summary of Registered Agricultural Pesticide Chemical Uses

2,4-DICHLORO-6-o-CHLOROANILINO-s-TRIAZINE*

PRINCIPAL FORMULATIONS: 50% wettable powder; 5% dust

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. Actual/A.	
Blackberries	10	2.0	14 days.
Blueberries	10	1.5	14 days.
Cantaloupes	10	3.0	No time limitations.
Celery	10	3.0	No time limitations. Treated celery should be washed and trimmed.
Cranberries	10	3.0	14 days.
Cucumbers	10	3.0	No time limitations.
Dewberries	10	2.0	14 days.
Garlic	1	3.0	No time limitations.
Honeydew melons	10	3.0	No time limitations.
Huckleberries	10	1.5	14 days.
Loganberries	10	2.0	14 days.
Muskmelons	10	3.0	No time limitations.
Onions (dry bulb)	1	3.0	No time limitations. Do not use on green or spring onions.
Onions (green)	10	1.5 (spray) 2.0 (dust)	No time limitations. (Not recommended for use in Florida).
Potatoes	1	2.6	No time limitations. Schedule applications in accordance with local recommendations and conditions.
Pumpkins	10	3.0	No time limitations.
Raspberries	10	2.0	14 days.
Shallots	10	1.5 (spray) 2.0 (dust)	No time limitations. (Not recommended for use in Florida).

*Proprietary name: "Dyrene"

USDA Summary of Registered Agricultural Pesticide Chemical Uses

2,4-DICHLORO-6-o-CHLOROANILINO-s-TRIAZINE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. Actual/A.	
Squash	10	3.0	No time limitations.
Strawberries	10	3.0	5 days.
Tomatoes	10	2.6	No time limitations. Schedule applications in accordance with local recommendations and conditions.
Watermelon	10	3.0	No time limitations.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

3',4'-DICHLORO CYCLOPROPANE CARBOXANILIDE

PRINCIPAL FORMULATIONS: 24.4% emulsifiable concentrate

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Corn (field)		lbs. actual/A. 1.5	Postemergence application as a directed spray when crop is 18-20" tall. Do not use treated foliage or stalks for silage or feed for livestock.

Proprietary Name: Cypromid
 Issued: 10-1-65

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USDA Summary of Registered Agricultural Pesticide Chemical Uses

1,4-DICHLORO-2,5-DIMETHOXYBENZENE

PRINCIPAL FORMULATIONS: 10% Dust; 65% W.P.

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Cotton		lbs. act./A. 2.0	Apply in furrow over seed and covering soil at time of planting. Use only in conjunction with standard fungicide seed treatment.

*Demosan

Issued: 10-1-65

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USDA Summary of Registered Agricultural Pesticide Chemical Uses

DICHLORO ETHYL ETHER

PRINCIPAL FORMULATIONS: Technical material

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Beets		0.5% in water	Apply to soil around seedling plants at the rate of 6.25 gallons per 100 ft. of row.
Broccoli		0.5% in water	Apply to soil around seedling plants at the rate of 6.25 gallons per 100 ft. of row.
Cabbage		0.5% in water	Apply to soil around seedling plants at the rate of 6.25 gallons per 100 ft. of row.
Cauliflower		0.5% in water	Apply to soil around seedling plants at the rate of 6.25 gallons per 100 ft. of row.
Corn		1.0% in oil	No time limitations. Apply as a spray to silks.
Onions		0.5% in water	Apply to soil around seedling plants at the rate of 6.25 gallons per 100 ft. of row.
Radishes		0.5% in water	Apply to soil around seedling plants at the rate of 6.25 gallons per 100 ft. of row.
Turnips		0.5% in water	Apply to soil around seedling plants at the rate of 6.25 gallons per 100 ft. of row.
Soil Treatment		105 lbs./A	Thoroughly water soil 12 hours prior to application. Apply in 0.3% water emulsion. Disc heavy soils prior to application.

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2,5-DICHLORO-3-NITRO BENZOIC ACID, SODIUM SALT*

PRINCIPAL FORMULATIONS: 21.1% liquid containing 2 lbs. of active ingredient per gallon

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Safflower (seed crop)		lbs. actual/A. 2.0	Preemergence application at time of planting or soon after. or Preplanting soil application to prepared seed bed and incorporated into top 1-2 inches of soil immediately prior to planting. Do not graze treated areas or feed treated forage to livestock. Do not use seed from treated crops for food, feed, or oil purposes.

*Dinoben

Issued: 2-10-65

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USDA Summary of Registered Agricultural Pesticide Chemical Uses

2,6-DICHLORO-4-NITROANILINE

PRINCIPAL FORMULATIONS: 50 & 75% wettable powder; 6% dust; 0.2% impregnated fruit wraps

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Apricots	20	5 (spray) 3 (dust)	Do not apply within 1 day of harvest.
Beans Green Pole	20	3.0	West Coast area only. Do not apply within 7 days of harvest. Do not feed treated forage to livestock.
Cherries Sweet	20	10 (spray) 3 (dust)	Preharvest application and postharvest application while sorting cherries.
Garlic	5	24.0	Soil application before seeding and spray to soil around sets.
Grapes	10	1.8 (dust)	Do not apply within 1 day of harvest.
Lettuce Leaf (greenhouse)	10	2.0	West Coast only. Do not apply to wilted plants or seedlings. Do not apply within 14 days of harvest.
Lettuce Head		2.0	West Coast only. Do not apply within 14 days of harvest.
Nectarines	20	5 (spray) 3.6 (dust)	Do not apply within 1 day of harvest.
Onions	5	24.0	Soil application before seeding or spray to soil around sets or buds.
Peaches	20	5 (spray) 3.6 (dust)	Do not apply within 1 day of harvest.
		0.75 lbs. actual/100 gals. water	Postharvest spray or dip to peaches for freezing or canning. Do not use on peaches for fresh fruit market.
		0.2% wrap (2000 ppm on paper)	Fruit wrap tissues.

Proprietary Name: Botran
Issued: 10-1-65

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USDA Summary of Registered Agricultural Pesticide Chemical Uses

2,6-DICHLORO-4-NITROANILINE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Strawberries	15	lbs. actual/A. 1.5	No time limitations.
Sweet potatoes	10	0.75 lbs. actual/100 gals. water	Postharvest spray after sweet potatoes have been washed and while they are on conveyor or dip for 10-15 seconds.
Tomatoes (greenhouse)	5	0.75 lbs. actual/100 gals. water or 1.8 (dust)	Spray application to stems of plants. Do not drench seedlings or newly set trans- plants. No time limitations.
Tomatoes (field)	5	1.9	California only. No time limitations.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

2,4-DICHLOROPHENOXYACETIC ACID*

PRINCIPAL FORMULATIONS: 3.75% to 98.0% sodium & amine wettable powder; 10% to 74.2% amine solution; 1.2% to 18.0% "volatile" dusts; 8.8% to 99.0% "volatile" emulsifiable concentrates; 20.55% to 95.0% "low volatile" emulsifiable concentrates; 32.0% to 39.0% 2,4-D acid; 14.5% to 43.5% granular formulations

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Apples	5	2.0	2,4-D acid and oil soluble amine formulations. Apply when weeds are young and actively growing. Do not allow spray to contact leaves, fruit or stems.
Asparagus	5 (from sodium salt of 2,4-D only)	2.0	Preemergence application immediately after discing on established bed, or after postharvest discing.
		1.0	Postemergence application. Young seedlings.
		2.5	During harvest. Not over 2 applications spaced 1 month apart. Postharvest application. Use drop nozzles to keep spray off plant.
Barley		1.5	Full tiller to boot stage and after milk stage to harvest. Do not apply from boot to milk stage or in seedling stage.
Blueberries		3.0	Apply in fall after blueberry leaves have fallen and before a burn. Repeat fall application in 2-3 years.
Corn (field)		2.0	Preemergence application. Do not use on light sandy soil. Double dosage on muck soils.
		1.5	Postemergence application. Emergence to tasseling. Do not apply from tasseling to dough stage. Use drop nozzles when corn is over 10 in. high.
		1.3	After early dough stage.
Corn (pop)		0.5	Postemergence application when 3-10 in. tall.

*2,4-D

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USDA Summary of Registered Agricultural Pesticide Chemical Uses

2,4-DICHLOROPHENOXYACETIC ACID

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Corn: (cont.)		lbs. actual/A.	
Sweet		1.5	Preemergence application. Do not apply on light sandy soil.
		0.75	Post-emergence application. Emergence to tasseling.
		0.42	After early dough stage.
Cranberries		1.0	Apply broadcast over bogs up to white bud stage. Do not apply after first flowers open.
		0.25% (in water)	Apply by swabbing weeds above crop any time up to end of blossom period. Do not drip solution on cranberry plants.
		4.0	Broadcast over bog after drawing down winter flood or on ice before spring thaw while cranberries are dormant.
Cropland		40.0	Apply in fall or spring. Remove treated area from crop production for 1 year until chemical has been inactivated in the soil.
Flax		1.0	Post-emergence application before bud stage.
		0.5	When seed is mature.
Grains:			
Barley		1.25	Tiller to boot stage.
Corn			
Oats		0.75	After dough stage.
Rice			
Rye		0.25	Tiller to boot stage. Apply to grain underseeded to legumes (alsike, ladino, red clovers and lespedeza).
Sorghum			
Wheat			
Grapes:			
Vineyard		4.4	Dormant season application.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

2,4-DICHLOROPHENOXYACETIC ACID

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Grapes: (Cont.)			
Vineyard		1.5	Apply before grape canes reach the ground. Use a hooded boom sprayer to prevent drift to grape foliage.
		1.5	Drag wax bar over bindweeds in 30-36 inch wide band under trellis of bearing vineyards, when bindweed start to bloom and before grape vines reach the ground. Keep bar off grape vine shoots. Trim off grape shoots that are on the ground.
Grapefruit	5	24 ppm	To increase fruit size, reduce fruit drop. Apply June or July. Do not apply to trees less than 6 years old, or during major flush of leaf growth, or within 7 days of harvest. Do not apply concentrated spray.
Grass:			
Hay Crop		2.0	Tiller to boot stage. Do not spray seedling grasses or when grass is from boot to milk stage.
Lakes, ponds, streams:			
Emerged Weeds		2.4	Apply as coarse spray when weeds are actively growing.
Submerged Weeds		87.0	Apply as granular form in spring broadcasting from boat or shore, and on ice in winter.
Lemons	5	12 ppm	To reduce fruit drop. Apply during Nov. or Dec. Do not apply to trees less than 6 years old, or during major flush of leaf growth, or within 7 days of harvest. Do not apply concentrated spray.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

2,4-DICHLOROPHENOXYACETIC ACID

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Lemons (Cont.)	5	lbs. actual/A. 500 ppm	To delay degreening and increase storage life-apply to harvested fruit as wax emulsion or as water spray before storage.
Oats		1.5	Full tiller to boot, after milk stage to ripening grain. Do not apply from boot to milk or in seedling stage.
Oranges	5	24 ppm	To increase fruit size and reduce fruit drop. Apply in fall as whitewash treatment. Do not apply to trees less than 6 years old, or during major flush of leaf growth or within 7 days of harvest. Do not use concentrated spray.
Pasture:			
Clover		6.0	Woody plants and brush. Apply when grasses are well established and woody plants growing actively. Do not apply when grass is in boot to milk stage. Do not apply to newly seeded areas or after heading begins. Do not graze dairy animals on treated areas within 7 days after application.
Grass		1.5	Broadleaf weeds--annuals. Apply when weeds are actively growing. Do not apply when grass is in boot to milk stage. Do not apply to newly seeded areas or after heading begins. Do not graze dairy animals on treated areas within 7 days after application.
		3.0	Broadleaf weeds--perennials. Apply when weeds are actively growing and near bud stage. Do not apply when grass is in boot to milk stage. Do not apply to newly seeded areas or after heading begins. Do not graze dairy animals on treated areas within 7 days after application.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

2,4-DICHLOROPHENOXYACETIC ACID

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Pasture: (Cont.)			
Clover Grass		0.5	Bent and susceptible grass pastures. Do not apply when grass is in boot to milk stage. Do not apply to newly seeded areas or after heading begins. Do not graze dairy animals on treated areas within 7 days after application.
		1.0	Clover and alfalfa pastures. Do not apply when grass is in boot to milk stage. Do not apply to newly seeded areas or after heading begins. Do not graze dairy animals on treated areas within 7 days after application.
Pears	5	2.0	2,4-D acid and oil soluble amine formulations. Apply when weeds are young and actively growing. Do not allow spray to contact leaves, fruit or stems.
Potatoes		2.0	Preemergence application.
		1.12 oz./A.	To intensify red color and improve skin appearance. Apply when potatoes are in prebud stage (7-10" high); second application 10-14 days later.
Rangeland:			
Rangegrass Rangeland Clearance Ranges		3.0	Broadleaf weeds. Apply in spring when weeds are growing rapidly.
		6.0	Woody plants. Apply when woody plants are actively growing in spring or fall.
Raspberries		1.0	Apply to first year and nonfruiting stands. Do not apply to growing tip, flowers, or fruiting canes.
Resistant Crops (such as grasses)		4.0	Spot treatment.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

2,4-DICHLOROPHENOXYACETIC ACID

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Rice		1.25	Tiller to boot. If granules are used, apply 3 lbs. when rice is 2 weeks old.
		1.7	After flooding (3-21 days). Do not apply after seed stalks have emerged.
Rye		1.5	Tiller to boot stage and after milk stage to ripening grain. Do not apply from boot to milk stage or in seedling stage.
Sorghum			
Milo		2.0	Preemergence. Do not apply on light sandy soil.
Milo maize		1.0	Postemergence. Emergence to flowering. Use drop nozzles when crop is over 10 inches high. Do not apply during flowering or early dough stages.
Soybeans		0.5	Apply by dragging waxed bar over coffee bean weeds 2-3 inches above crop. Do not allow wax bar to contact soybean plants. Do not mount bar in front of tractor.
Strawberries		1.5	Apply after transplanting on first year beds. Apply after harvest before runners form on established beds. Do not apply during bud, flower, or fruit stage.
		2.4	Dormant application.
Sugarcane		2.0	Preemergence application before canes appear. or Postemergence application in spring after cane emerges and through lay-by.
Wheat		1.5	Full tiller to boot and after milk stage to ripening grain. Do not apply from boot to milk stage or in seedling stage.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

4-(2,4-DICHLOROPHENOXY) BUTYRIC ACID*

PRINCIPAL FORMULATIONS: 37.5% isooctyl ester; 33.5% butoxy ethanol ester;
23.0%, 26.3% dimethyl amine salt

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Forage Legumes:			
Alfalfa		2.0	Apply to seedling legumes when weeds are less than 3 inches high or to established legumes before flowering. Do not graze livestock on, or cut hay from treated fields within 30 days after treatment.
Alsike Clover			
Birdsfoot			
Trefoil			
Ladino Clover			
Red Clover			
White Clover			
Nurse Crops:			
Barley		2.0	Apply to seedling legumes when weeds and legumes are less than 3 inches tall and nurse crops are 1-6 inches tall. Do not graze livestock on, or cut hay from, treated fields within 30 days after treatment.
Flax			
Oats			
Wheat			
(underseeded to forage legumes)			
Peas			
Canning		1.5	Apply when peas are in 4-6 node stage (just before blooming). Do not graze or feed treated forage to livestock within 30 days after application.
Freezing			
Seed Crops			
Soybeans		0.21	Apply as an overall spray 7-10 days before bloom up to midbloom.

*4(2,4DB)

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USDA Summary of Registered Agricultural Pesticide Chemical Uses

O-2,4-DICHLOROPHENYL O,O-DIETHYLPHOSPHOROTHIOATE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Tomatoes (cont.)		lbs. actual/A. 112.5	Preplanting soil application only; allow at least 14 days between treating and planting. Do not treat more than once a year.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

O-(2,4-DICHLOROPHENYL) O-METHYL ISOPROPYL PHOSPHORAMIDOTHIOATE

PRINCIPAL FORMULATIONS: 33% emulsifiable concentrate

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Peanuts (seed crop)		lbs. actual/A. 7.5 (with 3.75 lbs. DMBP)	Apply at time of emergence during early cracking stage as an overall spray. Do not use seed for food, feed, or oil purposes.

Proprietary Name: Zytron
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Follows page 265

USDA Summary of Registered Agricultural Pesticide Chemical Uses

DICHLOROPROPENE-DICHLOROPROPANE*

PRINCIPAL FORMULATIONS: Liquid mixture containing 10 lbs. per gallon

USE	TOLERANCE - (ppm)	DOSAGE	LIMITATIONS
Citrus Fruits:		lbs. Actual/A.	
Grapefruits		600-2000	Preplanting soil application. Do not treat extremely heavy soils. Dosage rate increases as soil becomes heavier and as deeper penetration of the chemical is required. Do not apply near living plants.
Kumquats			
Lemons			
Limes			
Oranges			
Tangeloes			
Tangerines			
Field and Forage Crops:			
Alfalfa		180-600	Preplanting soil application. Wait 1 week before planting for each 10 gal./A. applied--longer in case of heavy rains or temperatures below 60 degrees F. Do not treat extremely heavy soils. Do not apply near living plants.
Barley			
Birdsfoot			
Trefoil			
Buckwheat			
Clover			
Corn			
Cotton			
Flax			
Grasses			
Hops			
Lespedeza			
Millet			
Milo			
Oats			
Pasture Grass			
Peanuts			
Popcorn			
Rice			
Rye			
Safflower			
Sorghum			
Soybeans			
Sugarbeets			
Sugarcane			
Vetch			
Wheat			

*Proprietary Names: "D-D Mixture"; "Vidden-D"

USDA Summary of Registered Agricultural Pesticide Chemical Uses

DICRYL*

PRINCIPAL FORMULATIONS: 19.3% emulsifiable concentrate

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Cotton		lbs. actual/A. 3.0	Apply 7 days after cotton emerges and weeds are less than 11 days old (1/2 - 1 1/2 inches high). If split application is used, apply 2 lbs. as above and repeat with 1 lb. 4-10 days later. Do not apply after bolls form. Do not feed treated foliage to livestock.

*N-(3,4-dichlorophenyl) methacrylamide

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USDA Summary of Registered Agricultural Pesticide Chemical Uses

DIELDRIN*

PRINCIPAL FORMULATIONS: Emulsifiable concentrate containing 1.5 lbs. per gallon; 50% wettable powder; 1.5% dust; 5%, 10%, and 15% granular products; 50% and 75% wettable powders for seed treatments; fertilizer containing up to 24 lbs. of dieldrin per ton

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Apples	0.25	lbs. actual/A. 3.0	45 days. Full coverage spray or soil treatment.
		2.0	35 days. Full coverage spray or soil treatment.
Apricots	0.1	4.0	30 days. Full coverage spray.
		0.015 lbs./tree	Band treatment. Do not contaminate fruit.
Bananas	0.25 (on peel) 0 (in pulp)	0.5 3.0	4 days. Soil application to soil surface around trees. If liquids are used, apply as a coarse low-pressure spray. Do not contaminate foliage or fruit.
Barley	0.1 (grain) 0.75 (straw)	0.5 3.0	7 days. Preplanting soil application or at time of planting.
Barley (seed)		2.0 oz./bu.	Do not use for food or feed.
Beans (seed)		2.0 oz./bu.	Do not use for food or feed.
Beets	0.25	0.5	30 days.
Blackberries		1.0	Do not apply after first bloom.
Blackeyed Peas (seed)		2.0 oz./bu.	Do not use as food or feed.
Blueberries		1.0	Do not apply after first bloom.
Boysenberries		1.0	Do not apply after first bloom.
Broccoli	0.25	0.5	30 days.
Brussels sprouts	0.25	0.5	30 days.

*1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-1,4-endo,exo-4,8-dimethanonaphthalene

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USDA Summary of Registered Agricultural Pesticide Chemical Uses

DIELDRIN

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Rye	0.1 (grain)	0.5	7 days.
	0.75 (straw)	3.0	Preplanting soil application or at time of planting.
Rye (seed)		2.0 oz./bu.	Do not use as food or feed.
Salsify	0.1 (roots)	0.5	21 days.
	0.25 (tops)		
Sorghum	0	0.125	Single application. Do not apply within 40 days of harvest or cutting for ensilage.
		0.5	Do not apply within 60 days of harvest or cutting for ensilage.
Sorghum (seed)		2.0 oz./bu.	Do not use as food or feed.
Soybeans	0	1.0 oz./A.	Single application. Do not apply within 35 days of harvest or feeding.
Soybeans (seed)		2.0 oz./bu.	Do not use for food or feed.
Spinach	0.25	0.5	21 days.
Squash (summer)	0.25	0.5	7 days.
Strawberries	0.1	1.0	Foliage treatment only. Do not apply after fruit begins to form.
Sweet potatoes	0.1	1.5	21 days.
Swiss chard	0.25	0.5	21 days.
Tomatoes	0.1	0.75	15 days.
		0.5	7 days.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

DIELDRIN

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Tropical Fruits:			
Avocados	0	4.0	Preplanting soil application or when no fruit is present.
Bananas	0.25 (pulp)		
Guavas			
Mangoes	0.1		
Papayas			
Passion fruit			
Turnips	0.25 (roots & tops)	0.5	30 days.
Vegetables:			
Asparagus	0.1	3.0	Preplanting soil application, at time of planting, or before edible parts begin to form. Double dosages accepted in peat or muck soils.
Beans	0		
Beets	0.25		
Blackeyed peas	0		Wet or dry bait formulation. Apply to soil around plants. Do not contaminate edible parts. Follow preharvest limitation required for comparable dosage on each crop.
Broccoli	0.25	1.0	
Brussel sprouts	0.25		
Cabbage	0.25		
Cantaloupes	0		
Cauliflower	0.25		
Celery	0.25		
Collards	0.25		
Corn	0		
Cowpeas	0		
	(peas & hay)		
Cucumbers	0.25		
Eggplants	0.1		
Endive	0.25		
Garlic			
Horseradish	0.1		
Kale	0.25		
Kohlrabi	0.25		
Leeks			
Lettuce	0.25		
Melons			
Mustard greens	0.25		
Okra			

USDA Summary of Registered Agricultural Pesticide Chemical Uses

DIELDRIN

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Vegetables: (cont.)			
Onions	0.1	3.0	Preplanting soil application, at time of planting, or before edible parts begin to form. Double dosages accepted in peat or muck soils.
Parsnips	0.1		
Peas	0		
	(peas & hay)		
Peppers	0.1	1.0	Wet or dry bait formulation. Apply to soil around plants. Do not contaminate edible parts. Follow preharvest limitation required for comparable dosage on each crop.
Pimientos	0.1		
Pumpkins	0		
Radishes	0.1		
	(roots & tops)		
Rutabagas	0.25		
Salsify	0.1		
	(roots)		
	0.25		
	(tops)		
Shallots			
Spinach	0.25		
Squash	0.25		
(summer)			
Squash	0		
(winter)			
Sweet potatoes	0.1		Do not apply after blossoming.
Swiss chard	0.25		
Tomatoes	0.1		
Turnips	0.25		
	(roots & tops)		
Watermelons	0		
Watermelons	0	0.5	
Wheat	0.1	0.5	
	(grain)		
	0.75	3.0	
	(straw)		
Wheat (seed)		2.0 oz./bu.	Do not use for food or feed.
Winter squash	0	0.5	Do not apply after blossoming.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

DIELDRIN

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Animals:		lbs. actual/A.	
Sheep	0 (in meat)	0.003 lbs./head	Dust application immediately after shearing. Do not reapply. Do not apply within 90 days of slaughter.
Agricultural Premises:			
Barns (excluding dairy barns)		4.0% (lacquer)	Applied as spot or band treatment with a brush or spray. Do not contaminate feed or drinking water.
		2.0% (in water)	Residual surface application. Do not contaminate feed or drinking water. Do not apply in dairy barns or poultry houses.
Cage, poultry operations (in open range houses)		2.0% (in water)	Apply to droppings under poultry cages, walkways, and outside of building. Do not spray birds. Do not contaminate feed or drinking water. Do not apply inside poultry houses.
General:			
Imported Fire Ant Control on uncultivated land and crop-land		2.0	Soil application. Do not contaminate food crops.
		0.25% (in water)	Individual mound treatment. Three gallons per mound. Do not contaminate food crops.
Red Harvester Ant control		1.5% (in water)	Individual mound treatment. One gallon per mound. Do not contaminate food crops.
		2.5% (dust)	Apply dust to mound and in a band around mound. Do not contaminate food crops.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

O,O-DIETHYL O-3-CHLORO-4-METHYL-2-OXO-2H-1-BENZOPYRAN-7-YL-PHOSPHOROTHIOATE*

PRINCIPAL FORMULATIONS: 5.% dust; 25% wettable powder; 0.5% dust

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Cattle	1.0 (meat, fat, meat by products)	10.0 gram/ animal in water or mineral oil	Apply to the back of animals by sprinkling or brushing. Do not apply to lactating dairy animals or to dry dairy animals within 14 days of freshening.
	0 (in milk)	0.125% in water	Dip. Do not apply to lactating dairy animals or to dry dairy animals within 14 days of freshening.
		0.5 in water	Spray. No limitations for slaughter stock. Do not apply to lactating dairy animals or to dry dairy animals within 14 days of freshening.
		0.25% in water	Dip. No limitations for slaughter stock. Do not apply to lactating dairy animals or to dry dairy animals within 14 days of freshening.
		0.375% in water	Spray. No limitations for slaughter stock. Do not apply to dairy animals.
		1.0% (in oil)	Apply by backrubbers. Do not apply to dairy animals.
		5.0% (dust)	Apply locally in ears and adjacent head areas, in and around wounds, cuts, scratches, etc. Do not apply to lactating dairy animals or to dry dairy animals within 14 days of freshening.
Poultry	1.0 (meat, fat, meat by products)	0.25% in water	Apply 1 gallon per 100 birds.
		0.5% (dust)	Apply thoroughly to birds. or Apply 3 lbs. dust per 50 birds in self-treatment dust box.
	0 (in eggs)		

*Proprietary name: "Co-Ral"
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USDA Summary of Registered Agricultural Pesticide Chemical Uses

O,O-DIETHYL O-3-CHLORO-4-METHYL-2-OXO-2H-1-BENZOPYRAN-7-YL PHOSPHOROTHIOATE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Sheep & Goats	1.0 (meat, fat, meat by- products)	0.25% in water	Spray. Do not apply within 15 days of slaughter. Do not apply to lactating dairy animals or to dry dairy animals within 14 days of freshening.
	0 (in milk)	5.0% dust	Apply locally in ears and adjacent head areas, in and around wounds, cuts, scratches, etc. Do not apply to lactating dairy animals or to dry dairy animals within 14 days of freshening.
		0.5% (dust)	Apply 1-2 ounces per animal and rub into wool over entire body. Do not apply within 15 days of slaughter.
Swine	1.0 (meat, fat, meat by- products)	0.25% in water	Spray. No time limitations.
		5.0% (dust)	Apply locally in ears and adjacent head areas, in and around wounds, cuts, scratches, etc.
Agricultural Premises:			
Poultry Houses	1.0 (meat, fat, meat by- products)	0.25% in water	Spray litter and house at the rate of 1 gallon/1000 sq. ft.
		0.5% (dust)	Apply to litter at the rate of 5 lbs./100 sq. ft. Apply to all interior surfaces at the rate of 1.4 lbs./100 sq. ft.
	0 (eggs)	5.0% (dust)	Apply to litter at the rate of 6.6 oz./100 sq. ft. Apply to all interior surfaces at the rate of 2 oz./100 sq. ft.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

O,O-DIETHYL S-2-(ETHYLTHIO) ETHYL PHOSPHORODITHIOATE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Cabbage	0.75	1.5	Apply by drilling or sidedressing. Only one application per season. Do not apply within 42 days of harvest.
Cauliflower	0.75	1.0	Soil application to furrow at time of planting or as sidedressing after emergence. Do not apply more than twice per season. Do not apply within 40 days of harvest.
Coffee		0.3 to 0.6 grams actual per foot of tree height	Apply uniformly under tree canopy once per season. Do not apply within 90 days of harvest.
Corn		1.0	Apply granular or dust formulation to furrow at time of planting in a 4-6 inch band. Do not use corn from treated land for food, feed, or ensilage within 100 days after treatment. or Band or furrow soil treatment at time of planting or after emergence. Apply by soil injection or side dressing. Do not apply more than once per season. Do not use corn from treated land for food, feed or ensilage within 100 days after treatment.
Cotton	0.75 (on cotton seed)	1.0	Granular formulation. Apply by drilling or sidedressing at time of planting; or as a broadcast treatment after crop emerges. Do not apply within 28 days of harvest. Do not apply more than twice per season.
		1.0	Seed treatment. Apply to seed required to plant one acre.
Lettuce	0.75	2.0	Soil application to furrow or as sidedressing at time of planting. or Apply in fall or winter seeded lettuce as a sidedressing at thinning time. Do not apply within 60 days of harvest.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

O,O-DIETHYL S-2-(ETHYLTHIO) ETHYL PHOSPHORODITHIOATE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Oats	0.75 (grain)	1.0	Soil application at time of planting or after emergence. Do not apply more than twice per season. Do not apply within 60 days of harvest. Do not graze or cut for forage within 30 days after treatment.
	5.0 (forage or straw)		
Peanuts	0.75 (peanuts)	2.0	Granular: Soil application to furrow or as sidedressing at time of planting and as sidedressing at pegging time. Liquid: Spray in furrow or as soil injection sidedressing at time of planting, and at pegging time.
	5.0 (peanut hay)		
Pecans		2.5	New Mexico only. Apply as a band treatment to soil in 6 ft. bands on each side of trees. Bands should be located under main drip areas of trees. Work chemical into upper 2-3 inches of soil and irrigate immediately. Make only one application per season in early spring. Do not harvest nuts within 180 days after application.
Peas	0.75 (peas)	1.0	Soil application at time of planting.
	5.0 (vines)	2.5	Granular: Apply by drilling or broadcasting at time of planting or as a sidedressing after emergence. Liquid: Apply as a spray in furrow or by soil injection at time of planting or after emergence. Do not apply within 50 days of harvest. Do not apply more than once per season.
Pineapple	0.75 (pine- apple)	2.5	Apply broadcast or by base leaf feeding after plants have developed root systems. Do not apply more than twice per crop season. Do not apply within 60 days of harvest. When two applications are made, do not ensile foliage within one year following last application.
	5.0 (pine- apple foliage)		

USDA Summary of Registered Agricultural Pesticide Chemical Uses

O,O-DIETHYL O-[p-(METHYLSULFINYL) PHENYL] PHOSPHOROTHIOATE

PRINCIPAL FORMULATIONS: 10% granular

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Onions (dry bulb)		lbs. actual/A. 1 (granular)	Apply at time of planting. Do not apply to green bunch onions.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

O,O-DIETHYL O-2 PYRAZINYL PHOSPHOROTHIOATE*

PRINCIPAL FORMULATIONS: 10% granular; emulsifiable concentrate containing 4 lbs./gal.

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Asparagus		lbs. actual/A. 10.0	Broadcast soil application prior to transplanting or after transplanting before first spears emerge. Mix thoroughly into soil immediately after application. Do not harvest crop until second year after application. Do not apply to established beds.
Beans Snap		2.0	Preplanting broadcast soil application. Use proportionally less for band applications. (Pacific Northwest and Colorado only).
Broccoli		2.0	Preplanting broadcast soil application. Use proportionally less for band applications. (Pacific Northwest only)
		0.03% in water	Soil application at the rate of 6 fluid ounces per <u>plant</u> at time of transplanting. Over dosage may cause plant damage. (Pacific Northwest only)
Brussels sprouts		2.0	Preplanting broadcast soil application. Use proportionally less for band applications. (Pacific Northwest only)
		0.03% in water	Soil application at the rate of 6 fluid ounces per plant at the time of transplanting. Over dosage may cause plant damage. (Pacific Northwest only)
Cabbage		2.0	Preplanting broadcast soil application. Use proportionally less for band applications. (Pacific Northwest only)
		0.03% in water	Soil application at the rate of 6 fluid ounces per plant at time of transplanting. Over dosage may cause plant damage. (Pacific Northwest only).

*Proprietary Name: "Zinophos"

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USDA Summary of Registered Agricultural Pesticide Chemical Uses

O,O-DIETHYL O-2 PYRAZINYL PHOSPHOROTHIOATE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Cauliflower		lbs. actual/A.	
		2.0	Preplanting broadcast soil application. Use proportionally less for band applications. (Pacific Northwest only)
		0.03% in water	Soil application at the rate of 6 fluid ounces per plant at time of transplanting. Over dosage may cause plant damage. (Pacific Northwest only)
Corn		2.0	Preplant broadcast soil application. Use proportionally less for band applications. (Pacific Northwest only)
Cotton		1.0	North Carolina only. Soil application at time of planting as a 12" band centered over row.
Mint		5.0	Broadcast soil application in fall immediately prior to fall plowing or in April. Mix with soil immediately after application. (Pacific Northwest only)
Peanuts		3.0	Soil application at time of planting. Apply as a 12 inch band centered over row.
Strawberries		2.0	Preplant broadcast soil application. Use proportionally less for band applications. (Pacific Northwest only)
		1.5	Spray over row after harvest but not later than August 15.
		4 oz. of 4 lb./ gal. E.C./100 gals. water	Post plant drench. Apply 8 ozs. of solution per plant. Do not apply within 90 days of harvest.
Sugar beets		2.0	Preplant broadcast soil application. Use proportionally less for band applications. (Colorado only). Do not graze or feed treated sugar beet tops to livestock.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

O,O-DIETHYL O-[2-ISOPROPYL-4-METHYL PYRIMIDYL (6)] THIOPHOSPHATE*

PRINCIPAL FORMULATIONS: 25% and 50% wettable powder; 25% and 48% emulsifiable concentrate; 4% dust; 5%, 10% and 14% granular

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Alfalfa	40 on fresh alfalfa 10 on hay	lbs. actual/A.	
		0.5 (spray)	Dairy cattle, beef cattle, and sheep; (1) may be grazed immediately following application; (2) may be fed green alfalfa immediately following cutting; and (3) may be fed hay provided alfalfa is not cut for hay for 7 days following treatment. Do not spray livestock directly with either air or ground equipment. or Do not graze livestock on treated forage within 4 days after application. Do not cut for hay within 7 days after application.
		0.6 (dust)	Do not apply within 7 days of cutting or grazing by animals being finished for slaughter.
		4.0	Preplanting broadcast soil application.
		1.5	Do not graze livestock within 2 days after application. Do not cut for hay within 10 days after application.
Almonds	3.0 (in or on hulls)	6.0	No time limitations.
Apples	0.75	6.0	Full coverage spray. 14 days.
Apricots	0.75	4.0	Full coverage spray. 10 days.

*Proprietary name: "Diazinon"

USDA Summary of Registered Agricultural Pesticide Chemical Uses

O,O-DIETHYL O-[2-ISOPROPYL-4-METHYL PYRIMIDYL (6)] THIOPHOSPHATE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Bananas		lbs. actual/A. 2.0 0.0165 (oz. per stem) 0.033 (oz. per stem)	Apply to soil around mats 3 to 4 times at monthly intervals. Application should be made with hand or ground equipment. Wettable powder. Apply to inner surface of polyethylene bag which is tied securely around newly developing stem and left in place until harvest. Granular formulations. Apply in paper or plastic envelope and attach to stalk above bottom hand of newly developing stem. Then cover stem with polyethylene bag which is left in place until harvest.
Barley (seed)		2.0 oz./bu.	Do not use as food or feed.
Beans (snap)	0.75 (snap beans) 25.0 (bean forage & hay)	0.5 (spray) 1.4 (dust) 4.0	Do not apply within 7 days of picking beans. (After harvest is complete, treated forage may be fed to livestock after 1 day following treatment or cut for hay after 4 days following treatment). 7 days. Preplanting broadcast soil application.
Beans (seed)		2.0 oz./bu.	Do not use as food or feed.
Beets	0.75 (including tops)	0.5	14 days.

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O,O-DIETHYL O-[2-ISOPROPYL-4-METHYL-PYRIMIDYL (6)] THIOPHOSPHATE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Bermuda grass	60 ppm on grass of which not more than 40 ppm shall remain 24 hrs. after appli- cation	lbs. actual/A. 0.5	Dairy cattle, beef cattle and sheep; (1) may be grazed immediately following application; (2) may be fed green forage immediately following cutting; and (3) may be fed hay provided grass is not cut for hay for 21 days if the spray is a water solution or for 30 days if the spray is an oil solution. Do not spray livestock directly with either air or ground equipment. Do not repeat the application for 30 days.
Broccoli	10 ppm on grass hay		
	0.75	0.5 (spray) 1.6 (dust)	5 days.
		1.0	Furrow and seed treatment at time of planting.
		0.06% (in water)	Apply as a transplant solution at the rate of one cupful per plant.
		3.0	Plant beds only. Preseeding broadcast soil application.
		1.0	Broadcast soil application 1 to 2 days prior to sowing seed in plant beds or transplanting in fields. Mix with top 1-2" of soil.
		4.0	Preplanting broadcast soil application.
Cabbage	0.75	0.5 (spray) 1.6 (dust)	7 days.
		1.0	Furrow and seed treatment at time of planting.
		0.06% (in water)	Apply as a transplant solution at the rate of one cupful per plant.

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USDA Summary of Registered Agricultural Pesticide Chemical Uses

O,O-DIETHYL O-[2-ISOPROPYL-4-METHYL-PYRIMIDYL (6)] THIOPHOSPHATE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Cabbage (cont.)	0.75	lbs. actual/A. 3.0	Plant beds only. Preseeding broadcast soil application.
		1.0	Broadcast soil application 1 to 2 days prior to sowing seed in plant beds or transplanting in fields. Mix with top 1-2" of soil.
		4.0	Preplanting broadcast soil application.
Caneberries		6.0	Apply as a drench to lower canes and crown area. Do not apply when fruit is present.
Cantaloupe	0.75	0.75 (spray) 1.4 (dust)	3 days.
		4.0	Preplanting broadcast soil application.
Carrots	0.75	0.5 (foliar spray)	10 days.
		4.0	Preplanting broadcast soil application.
		2.0	Apply to seed furrow at time of planting.
Cauliflower	0.75	0.5 (spray) 1.6 (dust)	5 days.
		1.0	Furrow and seed treatment at time of planting.
		0.06% (in water)	Apply as a transplant solution at the rate of one cupful per plant.
		3.0	Plant beds only. Preseeding broadcast soil application.
		1.0	Broadcast soil application 1 to 2 days prior to sowing seed in plant beds or transplanting in fields. Mix with top 1-2" of soil.
		4.0	Preplanting broadcast soil application.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

O,O-DIETHYL O-[2-ISOPROPYL-4-METHYL-PYRIMIDYL (6)] THIOPHOSPHATE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Celery	0.75	0.5	7 days.
		4.0	Preplanting broadcast soil application.
Cherries	0.75	5.0	Postharvest application only.
		4.0	10 days.
Clover	40 ppm on fresh clover; 10 on clover hay	0.5 (spray)	Dairy cattle, beef cattle and sheep; (1) may be grazed immediately following application; (2) may be fed green clover immediately following cutting; and (3) may be fed hay provided clover is not cut for hay for 7 days following treat- ment. Do not spray livestock directly with either air or ground equipment.
		0.6 (dust)	Do not apply within 7 days of cutting or grazing by animals being finished for slaughter.
		4.0	Preplanting broadcast soil application.
Collards	0.75	0.5 (spray) 1.6 (dust)	10 days.
		1.0	Broadcast soil application 1 to 2 days prior to sowing seed in plant beds or transplanting in fields. Mix with top 1-2" of soil.
		4.0	Preplanting broadcast soil application.
Corn	0.75 (on ker- nels & cob with husks removed)	1.25 (spray)	Corn may be picked immediately following last application. Corn forage may be fed to dairy cattle, beef cattle, and sheep.
	40.0 (on corn forage)		or No time limitations on corn (fresh) or (grain). Do not feed treated forage to livestock within 2 days after treatment.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

O,O-DIETHYL O-[2-ISOPROPYL-4-METHYL-PYRIMIDYL (6)] THIOPHOSPHATE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Corn (cont.)	0.75 (on kernels & cob with husks removed) 40.0 (on corn forage)	1.6 (dust)	Do not apply within 2 days of harvest. Do not feed treated forage to animals being finished for slaughter within 2 days after treatment.
		1.0	Apply as a spray around base of plants, between time of planting and last cultivation.
		2.0	Soil application to furrow at time of planting.
		4.0	Preplanting broadcast soil application.
Corn (seed)		2 oz./bu.	Do not use as food or feed.
Cotton		0.5 (spray)	14 days. Do not graze dairy or meat animals in treated fields. Do not feed gin waste to livestock.
		1.0 (dust)	
Cotton (seed)		2 oz./bu.	Do not use as food or feed.
Cowpeas		4.0	Preplanting broadcast soil application.
Cranberries	0.75	3.0	7 days.
Cucumber	0.75	0.5 (spray)	7 days.
		1.6 (dust)	
		4.0	Preplanting broadcast soil application.
Endive	0.75	0.5	10 days.
		1.0	Broadcast soil application 1 to 2 days prior to sowing seed in plant beds or transplanting in fields. Mix with top 1-2" of soil.
		4.0	Preplanting broadcast soil application.
Figs	0.75	4.0	Full coverage spray. 10 days.
		2.5	Full coverage spray. 5 days.

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O,O-DIETHYL O-[2-ISOPROPYL-4-METHYL-PYRIMIDYL (6)] THIOPHOSPHATE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Radishes (continued)	0.75	lbs.actual/A. 1.0	Broadcast soil application 1 to 2 days prior to sowing seed in plant beds or transplanting in fields. Mix with top 1-2" of soil.
Rutabagas		1.0	Broadcast soil application 1 to 2 days prior to sowing seed in plant beds or transplanting in fields. Mix with top 1-2" of soil.
Rye (seed)		2.0 oz./bu.	Do not use as food or feed.
Sorghum		0.5	Do not apply within 14 days of harvest. Do not graze or feed forage to livestock within 14 days after application.
		4.0	Preplanting broadcast soil application.
Sorghum (seed)		2.0 oz./bu.	Do not use as food or feed.
Soybeans		4.0	Preplanting broadcast soil application.
Spinach	0.75	0.5	10 days.
		4.0	Preplanting broadcast soil application.
Squash (winter)	0.75	0.75 (spray) 1.4 (dust)	3 days.
		4.0	Preplanting broadcast soil application.
Squash (summer)	0.75	0.75 (spray) 1.4 (dust)	7 days.
		4.0	Preplanting broadcast soil application.
Strawberries	0.75	1.0 (spray) 1.2 (dust)	5 days.
		1.0	Broadcast soil application 1 to 2 days prior to sowing seed in plant beds or transplanting in fields. Mix with top 1-2" of soil.
		3.0	Postharvest use only.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

O,O-DIETHYL O-[2-ISOPROPYL-4-METHYL-PYRIMIDYL (6)] THIOPHOSPHATE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Sugar beets		lbs. actual/A. 4.0	Preplanting broadcast soil application.
		0.5	60 days. Do not feed treated tops to livestock.
Sugarcane		4.0 (spray)	Apply in a 12 inch band over seed pieces in open furrow at time of planting.
		6.0 granular	
		2.5 granular	Broadcast application to young plants. Do not apply more than 4 times during growing season. Do not apply within 45 days of harvest or feeding bagasse to livestock. Do not feed leaves and field trimmings to livestock.
		0.5 (spray)	Foliage application. Do not apply within 10 days of harvest or feeding bagasse to livestock. Do not feed leaves or field trimmings to livestock.
Sweet corn	0.75	4.0	Preplanting broadcast soil application.
Sweet potatoes		3.0	Apply at time roots begin to enlarge.
		4.0	Preplanting broadcast soil application.
Swiss chard	0.75	0.5 (spray)	12 days.
		1.6 (dust)	
Tomatoes	0.75	4.0	Preplanting broadcast soil application.
		0.75 (spray)	1 day.
		0.8 (dust)	
		1.0 granular	No time limitations.
		1.0	Broadcast soil application 1 to 2 days prior to sowing seed in plant beds or transplanting in fields. Mix with top 1-2" of soil.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

O,O-DIETHYL O-[2-ISOPROPYL-4-METHYL-PYRIMIDYL (6)] THIOPHOSPHATE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Tomatoes (cont.)		lbs. actual/A. 1.6 (dust)	3 days.
		4.0	Preplanting broadcast soil application.
Tropical fruits		30 gms./A.	Fruit pomace bait formulation. Do not contaminate fruit.
Turnips (tops)	0.75	0.75 (spray) 1.6 (dust)	10 days.
		1.0	Broadcast soil application 1 to 2 days prior to sowing seed in plant beds or transplanting in fields. Mix with top 1-2" of soil. or Apply to furrow at time of planting.
Walnuts		5.0	Do not apply after shucks split.
Watermelons	0.75	0.75 (spray) 1.4 (dust)	3 days.
		4.0	Preplanting broadcast soil application.
Wheat (seed)		2.0 oz./bu.	Do not use as food or feed.
Rangeland Ditch banks Roadsides Wastelands Noncrop areas Barrier strips	60 ppm on grass of which not more than 40 ppm shall remain 24 hrs. after appli- cation 10 ppm on grass hay	0.5	Dairy cattle, beef cattle, and sheep; (1) may be grazed immediately following application; (2) may be fed green forage immediately following cutting; and (3) may be fed hay provided grass is not cut for hay for 21 days if the spray is a water solution or for 30 days if the spray is an oil solution. Do not spray livestock directly with either air or ground equipment. Do not repeat the application for 30 days.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

O,O-DIETHYL O-[2-ISOPROPYL-4-METHYL-PYRIMIDYL (6)] THIOPHOSPHATE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Animals:		lbs. actual/A.	
Sheep	0.75 (fat, meat, & meat by prod- ucts)	0.03% (in water)	Apply one gallon per animal as a high pressure spray. Do not apply within 14 days of slaughter.
		0.06% (in water)	Apply one quart per animal as a low pressure spray or as a sprinkler can application. Do not apply within 14 days of slaughter.
		2.0% (dust)	Apply 1 1/2 oz. per animal. Do not apply within 14 days of slaughter.
Agricultural Premises:			
Barns		120 mgs./sq.ft.	Apply to interior and exterior surfaces as a residual spray. Do not contaminate milk, feed, or drinking water. Do not apply to animals. (Add sugar or molasses for bait spray.)
Dairy barns			
Milk rooms			
Poultry houses			
Animal sleep- ing quarters			
Etc.			
		5.0% (dust)	Apply thoroughly in cracks, crevices, and places where insects hide or congregate. Do not contaminate milk, feed, or drinking water.
		2.0% (bait)	Dry sugar bait formulation. Apply 40 gms. of bait per 1000 sq. ft. of floor space.
		10.0 gms./ 100 sq. ft.	Dry sugar bait formulation. Apply over breeding area.
		500 mgs./ft. of cord	Fly killing cord. Hang cord from rafters or ceiling at the rate of 300 ft. per 1000 sq. ft. of floor space.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

O,O-DIETHYL O-[2-ISOPROPYL-4-METHYL-PYRIMIDYL (6)] THIOPHOSPHATE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Mushroom houses		lbs. actual/A. 1.0% (in water) 0.5% (in water)	Apply as a spray to all exterior and interior surfaces and ventilators after compost has been pasturized by heating. Do not apply to compost or after spawning. Apply with a brush to wooden sides of beds, doors, posts, and other interior surfaces after compost has been pasturized.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

O,O-DIETHYL S-[4-OXO-1,2,3-BENZOTRIAZIN-3(4H)]-YLMETHYL PHOSPHORODITHIOATE*

PRINCIPAL FORMULATIONS: 11.1% emulsifiable concentrate containing 1 lb./gal. + 11.1% methyl guthion (1 lb./gal.)

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Cotton		lbs. actual/A. 0.5 (+ equal amount of methyl Guthion)	21 days. Do not pasture fields or feed gin waste if late season applications are made.
Potatoes		0.375 (+ equal amount of methyl Guthion)	14 days.

*Proprietary name: Ethyl Guthion

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USDA Summary of Registered Agricultural Pesticide Chemical Uses

1,2-DIHYDRO-6-ETHOXY-2,2,4-TRIMETHYLQUINOLINE*

PRINCIPAL FORMULATIONS: 70% liquid

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Apples	3	lbs. actual/A. 11.25 (2700 ppm) 3 pints/100 gals. water (2700 ppm)	Preharvest for scald control. Make only 1 spray application within 2 days of harvest. Post-harvest dip or spray for scale control. Dip fruit for 15 seconds or spray fruit passing over grader. Do not apply later than one week after harvest.
Pears	3	3 pints/100 gals. water (2700 ppm)	Post-harvest dip for scald control. Dip fruit for 15 seconds. Do not apply later than one week after harvest.

*Proprietary name: "Ethoxyquin"

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USDA Summary of Registered Agricultural Pesticide Chemical Uses

DIMETHOATE*

PRINCIPAL FORMULATIONS: Emulsion concentrate containing 4.0 and 2.67 lbs./gal.

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Alfalfa		0.5	Do not apply during bloom period. Do not apply within 28 days of harvest or pasturing. Do not apply more than once per season.
Apples		6.0	Single application prior to petal fall. Do not apply after petal fall. Do not apply during full bloom.
Beans (green, lima and snap)		0.5	Do not apply within 30 days of harvest. Do not graze treated fields or feed treated forage to livestock.
Broccoli		0.5	Do not apply within 21 days of harvest.
Cabbage		0.5	Do not apply within 21 days of harvest.
Cauliflower		0.5	Do not apply within 21 days of harvest.
Cotton		0.5	Do not apply within 14 days of harvest. Do not feed treated forage or graze livestock on treated fields. Do not repeat application within 14 days.
Peas		3 oz. actual/ acre	Do not apply within 21 days of harvest.
Peppers		0.33	14 days.
Potatoes		0.5	7 days.
Safflower (Calif.)		0.5	Do not apply within 14 days of harvest. Do not repeat application within 14 days.
Tomatoes		0.5	21 days.
Watermelons		0.5	7 days.

*O,O-dimethyl s-(methylcarbamoylmethyl) phosphorodithioate

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USDA Summary of Registered Agricultural Pesticide Chemical Uses

P-DIMETHYLAMINO BENZENEDIAZO SODIUM SULFONATE*

PRINCIPAL FORMULATIONS: 70% wettable powder; 2.5% dust

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Avocado		lbs. actual/A. 100 ppm in irrigation water	Apply at the rate of one gallon of treated irrigation water per square foot of soil on a monthly schedule. Do not apply within 14 days of harvest. Do not allow treated water to contact fruit or foliage.
Beans (snap, lima)		0.7 oz. act./ 100 lbs. seed	Seed treatment. Do not use treated seed for food or feed.
Corn		0.56 oz./100 lbs. seed	Seed treatment. Do not use treated seed for food, feed, or oil purposes.
Cotton		2 oz./100 lbs. seed	Seed treatment. Do not use treated seed for food, feed, or oil purposes.
		4 oz. act./ 100 lbs. seed	Planter box seed treatment.
		17 oz. actual/A.	Soil treatment. In furrow application at time of planting. Do not graze treated fields or feed treated forage to livestock.
Peas		0.7 oz. act./ 100 lbs. seed	Seed treatment. Do not use treated seed for food or feed.
Pineapples		14.0	Soil application at time of planting.
		2.8	Do not apply after redbud stage. Do not apply more than 7 times per season. May be used in addition to seedpiece treatment or soil treatment at time of planting.
		0.53 lbs. act./ 10 gals. water	Dip seedpieces at time of planting.
Sorghum		1.4 oz./100 lbs. seed	Seed treatment. Do not use treated seed for food, feed, or oil purposes.
Sugar beets		0.5 lbs. actual/A.	In furrow at time of planting.

*Proprietary name: "Dexon"

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USDA Summary of Registered Agricultural Pesticide Chemical Uses

P-DIMETHYLAMINO BENZENEDIAZO SODIUM SULFONATE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Sugarcane (propagation seed bed)		lbs. actual/A. 0.075 oz. 70% w.p./8 sq. ft.	Seed bed treatment only.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

4-DIMETHYLAMINO-m-TOLYL METHYLCARBAMATE*

PRINCIPAL FORMULATIONS: 80% wettable powder; 5% dust

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Cotton		lbs. actual/A. 2.0	Do not apply within 30 days of harvest. Do not apply after 25% of bolls are open. Cotton fields receiving late season application should not be grazed and gin trash from this cotton should not be fed.

*Proprietary Name: Metacil

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USDA Summary of Registered Agricultural Pesticide Chemical Uses

O,O-DIMETHYL S-[4-OXO-1,2,3-BENZOTRIAZIN-3 (4H) YMETHYL] PHOSPHORODITHIOATE*

PRINCIPAL FORMULATIONS: 12.5% and 25.0% wettable powder; emulsifiable concentrate containing 1.5 lbs. and 2 lbs. per gallon; 2.5% and 3.0% dust; 7% and 10% granular

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Alfalfa	2 (fresh forage)	0.75	21 days. Do not apply more than once between cuttings.
	5 (hay)		
Apples	2.0	6.0	15 days.
Apricots	2.0	2.5	21 days.
Artichokes	2.0	1.5 spray 2.1 dust	Do not apply within 30 days of harvest. Do not feed or ensile treated forage.
Beans (Snap)	2.0	0.5 spray 0.6 dust	Do not apply within 7 days of harvest. Do not feed or ensile treated forage.
Beans (Dry)		0.5 spray 0.6 dust	Do not apply within 30 days of harvest. Do not apply more than 4 times per season. Do not feed or ensile treated forage.
Blackberries	2.0	0.5 spray 0.9 dust	Foliar application. Do not apply within 14 days of harvest.
		2.0	Apply only before fruit set or after crop is harvested. Apply to lower portion of canes and to soil beneath plants.
		1.0	Apply to lower portions of canes and to soil beneath plants. Do not apply more than twice per season. Do not apply within 3 days of harvest.
Boysenberries	2.0	0.5 spray 0.9 dust	Foliar application. Do not apply within 14 days of harvest.

*Proprietary Name: "Guthion"
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USDA Summary of Registered Agricultural Pesticide Chemical Uses

O,O-DIMETHYL S-[4-OXO-1,2,3-BENZOTRIAZIN-3 (4H) YLMETHYL] PHOSPHORODITHIOATE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Boysenberries (Cont.)		2.0	Apply only before fruit set or after crop is harvested. Apply to lower portion of canes and to soil beneath plants.
		1.0	Apply to lower portion of canes and to soil beneath plants. Do not apply more than twice per season. Do not apply within 3 days of harvest.
Blueberries	2.0	1.0	Do not apply within 14 days of harvest.
Broccoli	2.0	0.75	15 days.
		0.75% (in water)	Apply as a soil drench at the rate of 1/2 pint per plant at the time of transplanting or immediately after.
Brussels sprouts	2.0	0.75% (in water)	Apply as a soil drench at the rate of 1/2 pint per plant at the time of transplanting or immediately after.
		0.75	Do not apply within 7 days of harvest.
Cabbage	2.0	0.75	21 days.
		0.75% (in water)	Apply as a soil drench at the rate of 1/2 pint per plant at the time of transplanting or immediately after.
Cantaloupes		0.5	14 days.
Cauliflower	2.0	0.75	15 days.
		0.75% (in water)	Apply as a soil drench at the rate of 1/2 pint per plant at the time of transplanting or immediately after.
Cherries	2.0	4.0	15 days. Full coverage spray. Do not apply more than 8 times per season.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

O,O-DIMETHYL S-[4-OXO-1,2,3-BENZOTRIAZIN-3 (4H) YLMETHYL] PHOSPHORODITHIOATE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Citrus fruits	2 (fruit) 5 (dried pulp)	7.5	A single application per year may be applied up to within 7 days of picking. Where 2 applications are required, the second spray should not be applied within 28 days of harvest. Do not apply more than twice per fruit year. Do not pick fruit or do other work involving contact with the tree, such as pruning, within 7 days of treatment.
Clover	2 (fresh forage) 5 (hay)	0.75	Do not apply more than once between cuttings. Do not apply within 21 days of harvest.
Cotton	0.5 (cotton- seed)	1.0	Do not apply within 1 day of picking. If late season applications are made, do not graze livestock on treated areas or feed gin waste.
Cowpeas		1.0	Do not apply within 7 days of harvest. Do not apply more than 4 times per season. Do not graze or feed treated forage to livestock.
Crabapples	2.0	3.75	15 days.
Cranberries	2.0	1.0	Do not apply within 21 days of harvest.
Cucumbers		0.5	Do not apply within 6 days of harvest. Do not apply more than 3 times per season.
Eggplants		0.5	Do not apply after edible parts begin to form.
Filberts		7.5	Do not apply within 30 days of harvest. Do not graze livestock in treated groves within 21 days after application.
Grapes	5.0	0.75	No time limitations. Do not apply more than 3 times per season.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

O,O-DIMETHYL S-[4-OXO-1,2,3-BENZOTRIAZIN-3 (4H) YLMETHYL] PHOSPHORODITHIOATE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Grapes (Cont.)		1.5	28 days. Do not apply more than 3 times per season.
		1.125	10 days. Do not apply more than 3 times per season.
Honeydew melons		0.5	14 days.
Loganberries	2.0	0.5 spray 0.9 dust	Foliar application. Do not apply within 14 days of harvest.
		2.0	Apply only before fruit set or after crop is harvested. Apply to lower portion of canes and to soil beneath plants.
		1.0	Apply to lower portion of canes and to soil beneath plants. Do not apply more than twice per season. Do not apply within 3 days of harvest.
Melons		0.5	14 days.
Nectarines	2.0	2.5	21 days.
		3.0	Do not apply after mid-season.
Onions	2.0	1.5	Apply to furrow at planting.
Onions (dry)		0.75	Do not apply within 28 days of harvest. Do not apply more than 3 times per season.
Peaches	2.0	2.5	21 days.
		3.0	Do not apply after mid-season.
Pears	2.0	6.0	15 days.
Pecans		10.0	Do not apply after husks split. Do not graze livestock in treated groves.
		5.6	Do not apply after husks split. Do not graze livestock in treated groves within 21 days after treatment.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

O,O-DIMETHYL S-[4-OXO-1,2,3-BENZOTRIAZIN-3 (4H) YLMETHYL] PHOSPHORODITHIOATE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Peppers		0.5	Do not apply within 5 days of harvest if not more than 4 applications are made. Do not apply within 14 days of harvest if more than 4 applications are made.
Plums	2.0	4.0	15 days. Do not apply more than 8 times per season.
Potatoes		0.75	7 days.
Prunes	2.0	4.0	15 days. Do not apply more than 8 times per season.
Quinces	2.0	6.0	15 days.
Raspberries	2.0	0.5 spray 0.9 dust	Foliar application. Do not apply within 14 days of harvest.
		2.0	Apply only before fruit set or after crop is harvested. Apply to lower portion of canes and to soil beneath plants.
		1.0	Apply to lower portion of canes and to soil beneath plants. Do not apply more than twice per season. Do not apply within 3 days of harvest.
Soybeans		0.5 spray 0.6 dust	Do not apply within 21 days of harvest. Do not graze or feed treated plants to livestock.
Spinach	2.0	0.5 spray 0.75 dust	Do not apply within 14 days of harvest.
Strawberries	2.0	0.5	5 days.
Sugarcane	0.3	1.5	Do not apply within 40 days of harvest. Do not apply more than 5 times per season. Treated cane must be burned off at harvest or washed before processing. Do not feed treated forage or harvest trash to livestock.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

O,O-DIMETHYL S-[4-OXO-1,2,3-BENZOTRIAZIN-3 (4H) YLMETHYL] PHOSPHORODITHIOATE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Tomatoes	2.0	0.75	No time limitations.
Walnuts		10.0	Do not apply after husks split. Do not graze livestock in treated groves within 21 days after treatment.
Watermelons		0.5	14 days.



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USDA Summary of Registered Agricultural Pesticide Chemical Uses

2-DIMETHYLCARBAMYL-3-METHYLPYRAZOLYL (5)-DIMETHYLCARBAMATE*

PRINCIPAL FORMULATIONS: 4.0% impregnated bands

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
<u>Agricultural Premises</u> Barns Dairy Barns Pig Parlors Poultry Houses Others		4.0% impregnated bands	Attach bands horizontally to ceiling at the rate of one band (50 gms. each) per 75 sq. ft. of ceiling space. Do not place bands over feed troughs, water troughs, or milking utensils. Do not contaminate feed or foodstuffs.

*Proprietary name: "Dimetilan"

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O,O-DIMETHYL S-2-(ETHYLSULFINYL) ETHYLPHOSPHOROTHIOATE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Potatoes		0.5	Do not apply within seven days of harvest.
Pumpkins		0.5	Do not apply more than once per season. Do not apply within 14 days of harvest.
Safflower (seed crop)		0.5	Do not graze or feed forage from treated areas to livestock. Do not use seed as food or feed.
Squash Summer Winter		0.5	Do not apply more than once per season. Do not apply within 14 days of harvest.
Sugar beets		0.5	Do not apply more than twice per season. Do not apply within 30 days of harvest or feeding tops and forage to livestock.
Watermelons		0.5	Do not apply more than twice per season. Do not apply within seven days of harvest.

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DIMETHYL 3-HYDROXYGLUTACONATE DIMETHYLPHOSPHATE

PRINCIPAL FORMULATIONS: 1% sugar bait

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
<p>Agricultural Premises:</p> <p>Barns Dairy Barns Animal Pens Cage Poultry Houses</p>		<p>1.0% (bait)</p>	<p>Apply at the rate of 4 ozs. of 1% bait per 1,000 sq. ft. of floors, sills, walks, and manure piles. Do not use inside human dwellings. Do not contaminate milk, milk handling equipment, feed, foodstuffs or drinking water. Do not treat areas or surfaces which are accessible to poultry or other livestock. Do not use treated garbage for animal feed.</p>

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DIMETHYL PHOSPHATE OF 3-HYDROXY N,N-DIMETHYL-CIS-CROTONIMIDE*

PRINCIPAL FORMULATIONS:

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Cotton		0.5	10 days. Do not graze livestock on treated fields or feed gin waste.
Potatoes (seed crop only)		1.0	Do not apply within 30 days of harvest. Do not graze livestock on treated fields or feed crop remains to livestock. Do not apply during heavy honey bee activity.
Rice (seed crop only)		1.0	Do not apply within 30 days of harvest. Do not graze livestock on treated fields or feed crop remains to livestock. Do not apply during heavy honey bee activity.
Soybeans (seed crop only)		1.0	Do not apply within 30 days of harvest. Do not graze livestock on treated fields or feed crop remains to livestock. Do not apply during heavy honey bee activity.

*Proprietary name: Bidrin

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USDA Summary of Registered Agricultural Pesticide Chemical Uses

DIMETHYLPHOSPHATE OF 3-HYDROXY-N-METHYL-CIS-CROTONAMIDE

PRINCIPAL FORMULATIONS: 56% emulsifiable concentrate

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Cotton		lbs. actual/A. 1.0	Do not apply within 21 days of harvest. Do not graze livestock on treated fields or feed gin waste.

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DIMETHYL-TETRACHLOROTEREPHTHALATE*

PRINCIPAL FORMULATIONS: 50%, 75% wettable powder

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Beans Field, dry	2	10.5	Soil application at time of seeding. Do not graze treated areas or feed plant parts to livestock.
Beans Snap (succulent)	2	10.5	Soil application at time of seeding. Do not graze treated areas or feed plant parts to livestock.
Broccoli	1	10.5	Soil application at time of seeding or immediately after transplanting.
Brussel sprouts	1	10.5	Soil application at time or seeding or immediately after transplanting.
Cabbage	1	10.5	Soil application at time of seeding or immediately after transplanting.
Cantaloupe	1	10.5	Soil application 4-6 weeks after seeding.
Cauliflower	1	10.5	Soil application at time of seeding or immediately after transplanting.
Collards	2	10.5	Soil application at time of seeding.
Cotton		10.5	Soil application at time of seeding.
		7.5	Soil application at time of last cultivation (lay by). Do not apply after bolls open. Do not graze treated areas or feed gin trash to livestock.
Cucumbers	1	10.5	Soil application 4-6 weeks after seeding.
Eggplant	1	10.5	Soil application at time of transplanting and at time of last cultivation (lay by, up to 6 weeks after transplanting).

*Proprietary name: "Dacthal" Apply only to mineral soils

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USDA Summary of Registered Agricultural Pesticide Chemical Uses

DIMETHYL-TETRACHLOROTEREPHTHALATE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Garlic	1	10.5	Soil application at time of seeding or at time of transplanting.
Honeydew melons	1	10.5	Soil application 4-6 weeks after seeding.
Kale	2	10.5	Soil application at time of seeding.
Lettuce (head)	2	10.5	Single soil application 1-6 weeks after seeding.
Lettuce (leaf)	2	10.5	Single soil application 1-3 weeks after emergence.
Mung beans (dry)	2	10.5	Soil application at time of seeding. Do not graze treated areas or feed plant parts to livestock.
Mustard greens	5	10.5	Soil application at time of seeding.
Onions	1	10.5	Soil application at time of seeding or at time of transplanting or at time of last cultivation (lay by, up to 14 weeks after seeding or transplanting).
Peanuts (seed crop only)		10.0	Soil application at time of seeding or at last cultivation. Do not use seed or plant parts from treated plants for food, feed, or oil purposes.
Peppers	2	10.5	Broadcast soil application at time of transplanting and at time of last cultivation (lay by, up to 6 weeks after transplanting).
Potatoes	2	10.5	Soil application at time of planting or drag off or at time of last cultivation (lay by, up to 9 weeks after planting).
Rice (seed crop only)		10.0	Soil application at time of seeding or immediately after. Do not use seed or plant parts from treated plants for food, or feed purposes.

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DIMETHYL-TETRACHLOROTEREPHTHALATE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Southern peas (blackeyed)	2	10.5	Soil application at time of seeding. Do not graze treated areas or feed plant parts to livestock.
Soybeans	2	10.5	Soil application at time of seeding. Do not graze treated areas or feed plant parts to livestock.
Squash (summer & winter)	1	10.5	Broadcast soil application 4-6 weeks after seeding.
Strawberries (new plantings)	2	9.0	Broadcast soil application at time of transplanting.
(established plantings)		9.0	Broadcast soil application in fall and early spring. Do not apply after first bloom.
Sweet potatoes	2	10.5	Broadcast soil application at time of transplanting and at time of last cultivation (lay by, up to 6 weeks after transplanting).
Tomatoes	1	10.5	Broadcast soil application 4-6 weeks after transplanting.
Turnips	5 (greens) 2 (roots)	10.5	Soil application at time of seeding.
Watermelons	1	10.5	Soil application 4-6 weeks after seeding.
Yams	2	10.5	Broadcast soil application at time of transplanting and at time of last cultivation (lay by, up to 6 weeks after transplanting).

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3,5-DIMETHYLTETRAHYDRO-1,3,5,2H-THIADIAZINE-2-THIONE*

PRINCIPAL FORMULATIONS: 50% and 85% wettable powders; 2% and 5% dusts

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
All Crops		lbs. actual/A. 348	Soil fumigation. Allow 2-3 week interval between treating and planting, longer if soil is very wet or temperature is below 60°F.
Citrus Replant- ing		400	Allow 3 week interval between treatment and time of planting, longer if soil is very wet or temperature is below 60°F.
Strawberry Plant Beds		290	Allow 3 weeks between treatment and planting, longer if very moist or if temperature is below 60°F.

*DMTT

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DINITRO-o-CYCLOHEXYLPHENOL
(DICYCLOHEXYLAMINE SALT)*

PRINCIPAL FORMULATIONS: 20% wettable powder

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Apples	1	3.0	15 days.
Apricots	1	3.0	15 days.
Cherries	1	3.0	15 days.
Citrus Fruits:			
Grapefruit	1	2.5	15 days.
Kumquat	1		
Lemons	1		
Limes	1		
Oranges	1		
Tangeloes	1		
Tangerines	1		
Nectarines	1	3.0	15 days
Peaches	1	3.0	30 days.
Pears	1	3.0	15 days.
Plums	1	3.0	15 days.
Prunes	1	3.0	15 days.
Quinces	1	3.0	15 days.

*Proprietary Name: "DN-111"

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USDA Summary of Registered Agricultural Pesticide Chemical Uses

2,3-p-DIOXANEDITHIOL-BIS-(O,O-DIETHYLPHOSPHORODITHIOATE)*

PRINCIPAL FORMULATIONS: 33% emulsifiable concentrate, 0.15% animal remedies

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Apples	4.9	6.0	7 days. Do not apply more than 7 times after fruit starts to form. Do not feed pomace from treated fruit to meat or dairy animals.
Beans (grown for dried beans only)		0.5	Do not use on beans to be harvested green. Do not feed treated vines or hulls to livestock.
Cotton		1 pt. of 33% E.C./A	Do not apply after bolls open. Do not graze dairy or meat animals in treated fields. Do not feed gin waste to livestock.
Grapes	2.1	0.75 (spray) 1.2 (dust)	14 days. Do not apply more than twice after grape fruit stems have begun to form.
		1.0 (spray)	No application after fruit stem formation.
Grapefruit	2.8	12.5	Do not make reapplication within 3 months if fruit is present during first application.
Lemons	2.8	12.5	Do not apply more than twice in one year. Do not make second application within 4 months after first application.
Limes	2.8	12.5	Do not apply more than twice in one year. Do not make second application within 4 months after first application.
Oranges	2.8	12.5	Do not make reapplication within 3 months if fruit is present during first application.

*Proprietary name: "Delnav"

USDA Summary of Registered Agricultural Pesticide Chemical Uses

2,3-p-DIOXANEDITHIOL-BIS-(0,0-DIETHYLPHOSPHORODITHIOATE)

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. Actual/A.	
Pears	4.9	6.0	7 days. Do not apply more than 7 times after fruit starts to form. Do not feed pomace from treated fruit to meat or dairy animals.
Quinces	4.9	6.0	7 days. Do not apply more than 7 times after fruit starts to form. Do not feed pomace from treated fruit to meat or dairy animals.
Tangeloes	2.8	12.5	Do not make reapplication within 3 months if fruit is present during first application.
Tangerines	2.8	12.5	Do not make reapplication within 3 months if fruit is present during first application.
Walnuts		4.0	Do not apply after husks split.
Animals:			
Beef cattle	1.0	0.15%	Dip or spray. Do not dip animals under 3 months of age. Do not reapply within 2 weeks. Do not apply to dairy animals.
Sheep & Goats	(in fat)	(in water)	Apply freely to wounds, cuts, and abrasions. Do not apply to dairy animals.
Swine		0.15% (smear or gas propelled spray)	
Beet cattle	1.0	0.6%	Apply by pouring one quart on back and shoulders of each animal. Do not re-apply within 30 days. Do not apply to dairy animals.
	(in fat)	(in water)	

USDA Summary of Registered Agricultural Pesticide Chemical Uses

DIPHENAMID*

PRINCIPAL FORMULATIONS: 50% and 80% wettable powder; 5% granules

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Apples		6.0	Apply to orchard floor after clean cultivation. Do not apply within 90 days of harvest. Do not graze livestock on treated areas.
Cabbage		6.0	Broadcast application at time of transplanting.
Cotton		4.0	Preemergence application at time of planting. Do not graze treated areas or feed treated plant parts to livestock.
Okra		5.0	Preemergence application at time of planting.
Peaches		6.0	Apply to orchard floor after clean cultivation. Do not apply within 90 days of harvest. Do not graze livestock on treated areas.
Peanuts		6.0	Apply at time of planting, soil cracking, or 7 days later.
		3.0	Postemergence application at cracking time or 7 days later. Used in combination with 1.5 lbs. of DNBP amine.
Peppers		5.0	Preemergence application to direct seeded crop. or Post-transplanting application within one month after transplanting.
Potatoes		6.0	Apply at time of planting or immediately after.
Soybeans		5.0	Preemergence application at time of planting. Do not graze treated areas or feed treated plant parts to livestock.

*N,N-dimethyl-2,2-diphenylacetamide
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DIPHENAMID

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Strawberries		6.0	Apply to soil in interrows between edges of plastic mulch.
Sweet potatoes		6.0	Apply at time of planting or immediately after.
Tomatoes		6.0	Preemergence application to direct seeded crop. or Apply immediately after transplanting. or Apply within one month following transplanting.
All Uses			Do not plant other food crops in treated soil within six months after last treatment. Do not use cover crop for food or feed within six months after last treatment. Small grain cover crops may be injured.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

DIPHENYL

PRINCIPAL FORMULATIONS: 1.75% impregnated wraps; 16.67% impregnated liners;
25.1% impregnated pads

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Citrus Fruits:			
Grapefruit	110	1.75%	Impregnated fruit wrapper
Lemons	110		
Oranges	110	25.10%	Impregnated pad, 2 pads per 4/5 bu. box.
		16.67%	Impregnated liners for boxes.

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DIPHENYL AMINE

PRINCIPAL FORMULATIONS: Technical material; 83% wettable powder; 0.1% impregnated wraps; 0.2% wax emulsion

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Apples	10	20 lbs./A. 0.1% impregnated paper wraps 2,000 ppm	Preharvest application to fruit within 36 hours of harvest. Do not graze cover crops in treated orchards. Do not use treated apples in the manufacture of pomace for livestock feed. Do not use individual wraps on apples treated with preharvest sprays of diphenyl amine. Postharvest dip, spray, or foam application before packing. Apply within 7 days after harvest. Do not apply to fruit receiving preharvest treatment of diphenyl amine. Do not wrap treated apples.
Animals: Beef cattle Dairy cattle Sheep & Goats Swine	0 in milk & meat	60%	Screw-worm smear or liquid formulations. Apply liberally as a spot treatment to wounds, cuts, and scratches. Repeat until healing is complete.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

DI-n-PROPYL MALEATE ISOSAFROLE CONDENSATE

USE	TOLERANCE (ppm)	DOSAGE lbs. Actual/A.	LIMITATIONS
Vegetables: (Cont.)			
Collards	Exempt	0.2	No time limitations.
Corn	Exempt	0.2	No time limitations.
Cowpeas	Exempt	0.2	No time limitations.
Cucumbers	Exempt	0.2	No time limitations.
Eggplants	Exempt	0.2	No time limitations.
Endive	Exempt	0.2	No time limitations.
Garlic	Exempt	0.2	No time limitations.
Horseradish	Exempt	0.2	No time limitations.
Kale	Exempt	0.2	No time limitations.
Kohlrabi	Exempt	0.2	No time limitations.
Leeks	Exempt	0.2	No time limitations.
Lettuce	Exempt	0.2	No time limitations.
Melons	Exempt	0.2	No time limitations.
Mustard Greens	Exempt	0.2	No time limitations.
Okra	Exempt	0.2	No time limitations.
Onions	Exempt	0.2	No time limitations.
Parsnips	Exempt	0.2	No time limitations.
Peas	Exempt	0.2	No time limitations.
Peppers	Exempt	0.2	No time limitations.
Pimentoes	Exempt	0.2	No time limitations.
Potatoes	Exempt	0.2	No time limitations.
Pumpkins	Exempt	0.2	No time limitations.
Radishes	Exempt	0.2	No time limitations.
Rutabagas	Exempt	0.2	No time limitations.
Salsify	Exempt	0.2	No time limitations.
Shallots	Exempt	0.2	No time limitations.
Spinach	Exempt	0.2	No time limitations.
Squash (Summer)	Exempt	0.2	No time limitations.
Squash (Winter)	Exempt	0.2	No time limitations.
Sweet Potatoes	Exempt	0.2	No time limitations.
Swiss Chard	Exempt	0.2	No time limitations.
Tomatoes	Exempt	0.2	No time limitations.
Turnips	Exempt	0.2	No time limitations.
Watermelons	Exempt	0.2	No time limitations.

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DIQUAT

PRINCIPAL FORMULATIONS: 34% emulsifiable concentrate containing 3.33 lbs./gal.
35.3% solution

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Alfalfa (seed crop)		lbs. actual/A. 1.0	Preharvest desiccation, apply 3 days before harvest. Do not graze treated areas or feed treated forage to livestock. Do not use seed from treated plants for food, feed, or oil purposes.
Clover (seed crop)		1.0	Preharvest desiccation, apply 3 days before harvest. Do not graze treated areas or feed treated forage to livestock. Do not use seed from treated plants for food, feed, or oil purposes.
Sorghum (seed crop)		1.0	Preharvest desiccation. Apply 1 week before harvest. Do not graze treated areas or feed treated forage to livestock. Do not use seed from treated plants for food, feed, or oil purposes.
Soybeans (seed crop)		1.0	Preharvest desiccation. Apply 1 week before harvest. Do not graze treated areas or feed treated forage to livestock. Do not use seed from treated plants for food, feed, or oil purposes.
Vetch (seed crop)		1.0	Preharvest desiccation, apply 3 days before harvest. Do not graze treated areas or feed treated forage to livestock. Do not use seed from treated plants for food, feed, or oil purposes.
Agricultural Premises:			
Canals		3.0	Apply in 150-200 gallons of spray to foliage of floating weeds.
Lakes			
Ponds		5.4 ppm in water	Inject below water surface for control of submerged weeds. Do not use treated water for human or animal consumption, spraying or for overhead irrigation within 10 days after treatment. Do not apply to muddy water.

*1,1'-ethylene-2:2'-dipyridylium dibromide

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DISODIUM METHYL ARSONATE*

PRINCIPAL FORMULATIONS: 50% and 100% soluble powder

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Cotton		lbs. actual/A. 3.0	Postemergence application. Apply one or two directed sprays to weeds when cotton is 3-4" tall and before first bloom. Keep spray off cotton foliage. Do not apply after first bloom. Do not graze or feed plants from treated areas to livestock.

*Proprietary name: DSMA

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DI-SODIUM SALT OF 2',2'-METHYLENE (3,4,6-TRICHLOROPHENOL)

PRINCIPAL FORMULATIONS: 20% liquid

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Cotton		lbs. actual/A. 0.75	Do not apply after seedling stage.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

DIURON*

PRINCIPAL FORMULATIONS: 80% wettable powder; 28% liquid; 2%, 5%, 16% and 20% granular

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Alfalfa Established	2	3.2	Dormant and semi-dormant application to established alfalfa (1 year or older).
Apples (orchards)		3.2	Apply as a directed spray to orchard floor during winter (Dec.-Feb.) or spring (Mar.-May), or as a split application in winter and spring. Total dosage should not exceed more than 3.2 lbs./acre/season.
Birdsfoot Trefoil	2 (hay forage)	1.6	Use only as dormant spray between Oct. 15 and Dec. 15.
Blackberries & related berries (established plantings 1 yr. or older)		2.4	Apply as directed single application in Jan. or Feb. (Reduce to 1.6 lbs./acre in split applications in Oct.-Nov. and late spring.) Do not apply within 60 days of harvest.
Blueberries		3.2	Single application to soil in Jan., Feb. or late spring. Keep spray off blueberry foliage. If split application is made, apply half the dosage in fall and repeat in spring. Do not replant treated areas to any crop within two years after last application.
Citrus:	1	8.0	Single application per year at any time of year under well established trees only. Do not spray fruit or foliage.
Grapefruit Oranges Tangeloes Tangerines	4 (in pulp)		
Grapefruit Lemons Oranges		3.2	Single application per year under well established trees only. Do not spray fruit or foliage.

*3-(3,4-dichlorophenyl)-1,1-dimethyl urea

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USDA Summary of Registered Agricultural Pesticide Chemical Uses

DIURON

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Grapefruit Lemons Oranges	1	1.6	Split applications (2 per year) under well established trees only. Do not spray fruit or foliage.
	4 (in pulp)	32.0	Apply to irrigation and drainage ditches when not in use, before growth starts or soon after mechanical cleaning, and before seasonal rains. If less than 4 in. rainfall before use, fill ditch with water, let stand 72 hrs., drain and waste water.
Corn Field	2.0 (forage)	0.8	Preemergence soil application.
	1.0 (grain)	0.6	Apply as a directed spray at time of last cultivation when crop is 20-30 inches high and weeds are less than three inches tall.
Cotton	1.0 (cotton-seed)	1.6	Preemergence application. Do not plant crops other than cotton, corn, or grain sorghum on treated land in the spring following treatment. or Apply at time of last cultivation as a directed spray when cotton is 12 or more inches tall. Do not plant crops other than cotton, corn, or grain sorghum on treated land in spring following treatment. If both preemergence and early postemergence applications have been made, reduce dosage so that total dosage for season does not exceed 3.2 lbs./A.
		0.4	Early postemergence application as a directed spray when crop is 6 or more inches tall. Two applications as needed.
		2.0	Preplanting application in irrigated cotton.

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DIURON

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Gooseberries		2.4	Apply in Jan. or Feb. as single application. (Reduce to 1.6 lbs./acre in split applications in Octo.-Nov. and Apr.-May). Direct spray away from bushes. Spring treatments should be at least 60 days prior to first picking.
Grapes	1.0	4.8	Single application per year under well established vineyards.
		1.6	Split applications in late fall or early spring under well established vineyards.
		9.6	Spot treatment. Apply in spring as a directed spray to established vineyards on heavy soils. Do not repeat application within 4 years.
Grass (seed crop)	2	1.6	Apply after October 15 to crop planted before April 1. Do not plant treated area to any other crop within 1 year after application.
		3.2	Apply between October 1 and November 15 to crop established one or more years. Do not plant treated area to any other crop within 2 years after application.
Macadamia nuts		4.0	Apply as a directed spray to orchard floor immediately after harvest. Do not exceed 8 lbs. actual Diuron per acre per year.
Oats (spring)		1.2	Preemergence application to drill planted oats. or Postemergence application within 6 weeks after planting. Single application only. Do not graze or feed forage from treated area to livestock. Do not replant treated areas to any other crop within 1 year after application, as injury to subsequent crops may result.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

DIURON

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Olives		1.6	Apply as split applications in Oct.-Nov. and Mar.-Apr.
Pears (orchards)		3.2	Apply as a directed spray to orchard floor during winter (Dec.-Feb.) or spring (Mar.-May), or as a split application in winter and spring. Total dosage should not exceed more than 3.2 lbs./acre/season.
Peppermint		2.4	Apply after last cultivation in spring prior to emergence of mint.
Pineapple	1	6.4	Apply immediately after planting.
		3.2	Apply after harvesting of plant crop.
		1.6	Postemergence of plant crop, apply over-all at 2 or more month intervals and before differentiation and interrow as needed. Do not apply more than 12.8 lbs./A. per plant crop.
Potatoes	1	0.8	Preemergence use only.
Raspberries (established plantings 1 yr. or older)		2.4	Lake States: Apply as directed single application in early spring before raspberries leaf out. West Coast States: Apply as single application in Jan.-Feb. (Reduce to 1.6 lbs./acre in split applications in Oct.-Nov. and late spring). Do not apply within 60 days of harvest.
Sorghum (grain) (seed crop only)		0.40	Postemergence application as a directed spray when crop is 15 or more inches tall. Do not replant treated areas to any crop within 4 months after treatment. Do not use grain or forage from treated areas for food or feed.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

DIURON

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Soybeans (seed crop)		0.2	Postemergence directed spray when crop is 8 or more inches tall. Do not use seed or forage for food, feed, or oil purposes.
Sugar cane	1	6.4	Apply after planting or after harvesting, of plant crop. Repeat with 2 sprays at half dosage, between rows as a directed spray or over emerged cane. Do not exceed 9.6 lbs. per crop cycle in Hawaii and Puerto Rico, or 4.8 lbs. in Florida.
		3.0	Make single application in fall after planting and before cane emerges; or in spring after shaving and offbarring before cane emerges or as directed spray if cane has emerged.
Tomatoes		0.8	Apply on soil as directed spray. No application after fruit begins to form.
Walnuts (English)		4.0	Single application in late fall or early winter to well established orchards (at least one year).
		2.4	Split applications. Apply in October or November and repeat in March or April. Avoid spraying foliage or fruit.
Winter oats (alone or mixed with peas or vetch)		1.6	Preemergence application to drill planted oats.
Winter wheat	2 (hay, forage, straw)	1.6	Preemergence application to drill planted wheat.
	1 (grain)		or Postemergence fall application or spring application, after growth starts. Single application only. Do not replant treated areas to any other crop within 1 year after application, as injury to subsequent crop may result.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

DIURON

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Irrigation ditches		lbs. actual/A. 80	Apply only during noncrop season.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

DNAP*

PRINCIPAL FORMULATIONS: 75% emulsifiable concentrate

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. Actual/A.	
Alfalfa		3.4	Dormant application to established alfalfa, or immediately after first cutting and before new growth starts. Do not graze animals on treated fields.
		2.5	Dodder control. Apply immediately after first cutting and before new growth starts.
Asparagus		1.7	Dormant application in late fall or early winter, after seed has been harvested.
Clover			
Ladino		2.5	Dodder control. Apply immediately after first cutting and before new growth starts. Do not graze livestock in treated fields.
Trefoil			
Orchards:			
Almonds		2.5	Dormant application to soil in early spring.
Apples			
Apricots			
Cashews			
Cherries			
Chestnuts			
Dates			
Figs			
Filberts			
Hazelnuts			
Hickory Nuts			
Nectarines			
Olives			
Peaches			
Pears			
Pecans			
Persimmons			

*4,6-Dinitro o-sec-amylphenol

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USDA Summary of Registered Agricultural Pesticide Chemical Uses

DNBP*

PRINCIPAL FORMULATIONS: 40%, 45%, 53% and 55% emulsifiable concentrates;
22% granular formulation

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Alfalfa		2.2	Apply immediately after 1st cutting & before new growth starts. Do not graze treated areas or feed treated forage to livestock.
		2.4	After fall cutting.
		1.9	Dormant application when weeds are in rosette stage or less than 5 in. tall.
		1.9	Dodder control. Apply immediately after first cutting or before regrowth starts. Do not graze treated areas or feed treated forage to livestock.
Alfalfa (seed crop only)		2.5	Preharvest defoliation. Apply 3-6 days before harvest. Do not graze treated areas or feed treated forage to livestock.
Asparagus		1.3	Apply in late fall or early winter after seed is harvested.
Beans (field, lima, snap)		1.0	Preemergence application. Apply at least 1 day before crop emerges.
Bush fruits: Blackberries Blueberries Currants Gooseberries Raspberries		2.8	Apply in fall after harvest or in early spring before bloom as a directed spray.
Citrus groves		1.9	Apply when weeds appear. Do not contaminate fruit.
Clovers: Trefoil, red & sweet		1.9	Postemergence application. Apply after 2-true-leaf stage. Do not graze treated areas or feed treated forage to livestock.

*4,6-dinitro-o-sec-butylphenol

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USDA Summary of Registered Agricultural Pesticide Chemical Uses

DNBP

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Dodder control		1.9	Apply immediately after 1st cutting & before regrowth starts. Do not graze treated areas or feed treated forage to livestock.
Corn		2.0 (with 2,4-DEP)	Preemergence application to time of planting or before corn emerges. Do not apply to light sandy soil or to shallow planted corn.
Cucurbits		1.0	Preemergence application. Apply at least 1 day before crop emerges.
Date groves		1.9	Apply to cover all weed foliage.
Flax (seed crop only)		2.5	Preharvest defoliation. Apply 3-6 days before harvest. Do not graze treated areas. Do not use seed for food, feed, or oil purposes.
Grapes		2.8	Apply in spring before bloom or in fall after harvest as a directed spray between rows. Do not apply to young canes earmarked for bearing canes.
		1.9	Apply once or twice within 4 weeks after bloom as a directed spray to soil. Do not apply to grape vines.
Hops		1.25	Do not apply within 14 days of harvest. Do not make more than 4 applications per season. Do not spray entire bines. Do not apply to young plants in mature hop-yards or to "baby" yards.
Milo (seed crop only)		1.9	Preharvest defoliation. Apply 10-14 days before harvest. Do not graze treated areas or feed treated forage or seed to livestock.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

DNBP

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Orchards (deciduous fruits & nuts)		9.0	Dormant or delayed dormant application only.
		1.9	Apply to orchard floor to cover all weed foliage. Do not contaminate fruit. Do not allow livestock to graze treated areas.
Peanuts		1.5	Preemergence application.
		2.25	Apply at cracking time (5 to 7 days after planting) to first true leaves.
Peanuts (seed crop)		3.75 (with 7.5 lbs. Zytron)	Apply at time of emergence during early cracking stage as an overall spray. Do not use seed for food, feed, or oil purposes.
Peas		1.3	Postemergence. Apply when crop is 4-6 in. tall.
Potatoes		1.0	Preemergence application. Apply at least 1 day before crop emerges.
		2.5	Preharvest vine killing. Apply 10 days before harvest. Do not spray exposed tubers. Do not graze livestock on treated areas.
Seed crop only:			
Trefoil clover		2.5	Preharvest defoliation. Apply 1-2 days before harvest. Do not graze treated areas or feed treated forage to livestock.
Ladino clover		1.9	Preharvest defoliation. Apply 2-3 days before harvest. Do not graze treated areas or feed treated forage to livestock.
Red clover		1.9	Preharvest defoliation. Apply 6-8 days before harvest. Do not graze treated areas or feed treated forage to livestock.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

DNBP

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Small seeded crops		0.625	Preemergence application. Apply at least 2 days before emergence.
Soybeans		1.5	Preemergence application only.
Soybeans (seed crop only)		2.5	Preharvest defoliation. Apply 2-5 days before harvest. Do not graze treated areas. Do not use seed for food, feed, or oil purposes.
Strawberry		1.9	Dormant application to middles and shoulders of established beds (Nov.-Jan.) In Pacific Coast States, apply as a dormant overall treatment.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

DNBP (Amine Salts)*

PRINCIPAL FORMULATIONS: 36% and 50% triethanolamine salt (liquid); 51%, 53% and 57% ethanol and isopropanolamine salts (liquids); 4% and 16.5% granular formulations

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Almonds		3.0	Dormant or delayed dormant application only.
Apples		4.0	Dormant or delayed dormant application only.
		6.0	Apply to orchard floor during delayed dormancy. Do not allow livestock to graze on treated ground cover.
Barley (alone or interplanted with legumes)		1.5	Single application when crop is 3-6 inches tall.
Beans (field, kidney, navy, snap, lima, dry)		9.0	Preemergence application. Do not apply to light sandy soil.
		4.5	Postemergence application. Apply during emergence but not beyond crook stage.
Cherries		3.0	Dormant application only.
Corn (field, pop, sweet)		9.0	Preemergence application.
		4.5	Postemergence application. Apply when corn is in tight roll and not beyond 2 leaf stage.
Cotton		11.25	Preemergence application. Do not apply when temperature is expected to exceed 85°F.
Cucumber		3.0	Preemergence application. Plant seed at least 1 inch deep.
Currants		3.0	Dormant application only.

*4,6-dinitro-o-sec-butylphenol (alkanol, ethanol, and isopropanolamine salts)

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USDA Summary of Registered Agricultural Pesticide Chemical Uses

DNBP (Amine Salts)

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Flax (seed crop)		1.9	Preharvest defoliant. Do not feed treated forage to livestock.
Grains (alone or interplanted with legumes)		1.5	Single application when grain is 3-6 inches tall.
Grapes		1.25	Dormant application as directed spray to ground under trellis.
		10.5	California irrigating areas. Dormant application. Do not graze treated areas.
Forage Legumes: Alfalfa Clovers (birdsfoot trefoil, ladino, red, sweet)			
Seedling		1.5	Apply when seedlings have 2 or more true leaves. Do not graze livestock on treated areas before the first cutting.
Seed crop		1.9	Preharvest defoliant. Do not feed treated forage to livestock.
Established		3.0	Apply in late fall or early winter while crops are dormant. Do not graze livestock on treated fields before the first cutting.
Milo (seed crops)		1.9	Preharvest defoliant. Do not feed treated forage to livestock.
Mint		9.0	Apply before mint breaks through ground or before mint is 1 inch tall.
Oats (alone or interplanted with legumes)		1.5	Single application when crop is 3-6 inches tall.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

DNBP (Amine Salts)

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Peaches		3.0	Dormant application only.
		10.5	California irrigating areas. Dormant application. Do not graze treated areas.
Peanuts		12.0	Preemergence application.
		6.0	Apply as plants begin to break through soil.
		3.0	Postemergence application before plants are 3 inches in diameter.
		1.5	Postemergence application as directed spray using shields, 2 applications up to 1 month after early cracking stage.
Pears		3.0	Dormant application only.
		10.5	California irrigating areas. Dormant application. Do not graze treated areas.
Peas		9.0	Preemergence application.
		2.25	Postemergence application when peas are 2-8 inches tall. Do not apply after flower buds are visible. Do not graze or feed forage or hay within 40 days after application.
Pecans		3.0	Dormant application only.
Plums		3.0	Dormant application only.
Potatoes		6.0	Preemergence application.
		2.25	Preharvest vine killing. Apply 10 days before harvest. Do not spray exposed tubers. Do not graze livestock on treated areas.
Prunes		3.0	Dormant application only.
Pumpkins		6.0	Preemergence application. Plant seed at least 1 inch deep.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

DNBP (Amine Salts)

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Rye (alone or interplanted with legumes)		1.5	Single application when crop is 3-6 inches tall.
Soybeans		11.25	Preemergence application. Do not apply to light sandy soil.
		3.0	Postemergence application. Apply during cotyledon to first true leaf stage and to seedling weeds. Do not apply when tem- perature is above 85°F.
Soybeans (seed crop)		1.9	Preharvest defoliant. Do not feed treated forage to livestock.
Squash		6.0	Preemergence application. Plant seed at least 1 inch deep.
Strawberries		6.0	Apply in late fall or early spring while crop is dormant.
		4.5	Apply immediately following harvest on established plantings.
Walnuts		4.0	Dormant application only.
Wheat (alone or interplanted with legumes)		1.5	Single application when crop is 3-6 inches tall.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

DNBP (Ammonium Salt)*

PRINCIPAL FORMULATIONS: 13% and 27% liquids

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Alfalfa		1.25	Dormant application to established crop only. Do not graze or cut for hay within 60 days after treatment. or Postemergence application when crop has 1 or 2 trifoliate leaves. Do not graze or cut for hay within 60 days after treatment.
Chives		1	Postemergence application from before emergence to 10 in. high.
Clovers:			
Alsike		1.25	Postemergence application when crop has 2 or more trifoliate leaves. Do not graze or cut for hay within 60 days after treatment.
Ladino			
Red			
Sweet			
Corn		1.5	Postemergence application when corn is still in the roll stage.
Flax		1.25	Postemergence application when flax is 5-8 inches high.
Garlic		1.5	Postemergence application before 4-6 inches high.

*4,6-dinitro-o-sec-butylphenol, ammonium salt

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DNBP (AMMONIUM SALT)

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Grain:			
Barley		1.25	Postemergence application when tillered and 3 to 6 inches tall. Do not graze or cut for hay within 60 days after treatment.
Oats			
Wheat			
		1.0	Postemergence application to grain inter-planted with legumes when tillered and 3 to 6 inches tall. Do not graze or cut for hay within 60 days after treatment.
Onions		1.5	Postemergence application to direct seeded crop after 2 leaf stage but before crop is 4-6 in. high. Do not apply on crop to be used as green table onions.
		1.0	Apply after onions grown from sets are well established. Do not apply to crop to be used as green table onions.
Peas		1.25	Postemergence application when crop is 2 to 8 inches tall and before flower buds appear. Do not graze or cut for hay within 60 days after treatment.
Vetch		1.25	Postemergence application when crop is 3 to 4 inches tall. Do not graze or cut for hay within 60 days after treatment.

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DNBP (TRIETHANOLAMINE SALT)*

PRINCIPAL FORMULATIONS: 36% and 51% liquid

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Almonds		12.0	Dormant application.
Apples		4.0	Dormant application.
Apricots		2.25	Chemical thinning, when 60-75% blossoms are open, using 450 gal. of spray/acre.
Cherries		8.0	Dormant application.
Currants		2.0	Dormant application.
Grapes		3.0	Dormant application.
Peaches		1.0	30 days.
		1.7	Chemical thinning when 85-90% blossoms are open, using 450 gal. of spray/acre.
Pears		4.0	Delayed dormant application.
		12.0	Dormant application.
Pecans		10.0	Dormant application.
Plums		8.0	Dormant application
		1.125	Chemical thinning when 85-90% blossoms are open, using 450 gal. of spray/acre.
Prunes		8.0	Dormant application.
		1.125	Chemical thinning when 85-90% blossoms are open, using 450 gal. of spray/acre.
Walnuts		10.0	Dormant application.

*4,6-dinitro-o-sec-butylphenol, triethanolamine salt; proprietary name: "DN-289"

USDA Summary of Registered Agricultural Pesticide Chemical Uses

DODINE*

PRINCIPAL FORMULATIONS: 65% wettable powder

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Apples	5	4.0	7 days. Do not use treated apples in the manufacture of apple pomace for use in livestock feeds.
		1.6	5 days. Do not use treated apples in the manufacture of apple pomace for use in livestock feeds.
Black walnuts		6.5	Do not graze meat or dairy animals in treated groves.
Cherries (sour)	5	2.5	No time limitations.
		3.25	Western states only. Do not apply after petal fall.
Cherries (sweet)		3.25	Western states only. Do not apply after petal fall.
Peaches		6.5	Western states only. Dormant and/or delayed dormant application only.
		1.62	Western states only. Do not apply after petal fall.
Peanuts		0.65	Do not feed treated peanut vines to meat or dairy animals.
Pears	5	4.0	7 days.
		1.6	5 days.
Pecans		4.6	Do not apply after shucks have started to open. Do not graze meat or dairy animals in treated groves.
Strawberries	5	1.3	14 days.

*Dodecylguanidine acetate

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DORMANT OILS*

PRINCIPAL FORMULATIONS: Usually marketed as emulsifiable concentrates containing a high percentage of oil

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Almonds	Exempt	96.0	Apply during dormancy when temperature is above 40°F.
Apples	Exempt	248.0	Apply during dormancy when temperature is above 40°F.
		100.0	Dormant or delayed dormant only.
Apricots	Exempt	140.0	Apply during dormancy when temperature is above 40°F.
		100.0	Dormant or delayed dormant only.
Blackberries	Exempt	30.0	Dormant application only.
Blueberries	Exempt	30.0	Dormant application only.
Boysenberries	Exempt	30.0	Dormant application only.
Cashews	Exempt	96.0	Apply during dormancy when temperature is above 40°F.
Cherries	Exempt	140.0	Apply during dormancy when temperature is above 40°F.
		100.0	Dormant or delayed dormant only.
Chestnuts	Exempt	96.0	Apply during dormancy when temperature is above 40°F.
Cranberries	Exempt	30.0	Dormant application only.
Currants	Exempt	30.0	Dormant application only.
Dewberries	Exempt	30.0	Dormant application only.
Figs	Exempt	70.0	Apply during dormancy when temperature is above 40°F.
Filberts	Exempt	96.0	Apply during dormancy when temperature is above 40°F.
Gooseberries	Exempt	30.0	Dormant application only.

*Phytotoxic to foliage; see also "Summer Oils," "Mineral Oil," and "Petroleum Solvents."

USDA Summary of Registered Agricultural Pesticide Chemical Uses

ENDOSULFAN

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Barley		0.5	Do not apply after heads begin to form. Do not feed treated forage to dairy animals or animals being finished for slaughter.
Beans		1.0	Do not apply after pods start to form. Do not feed treated threshings to live-stock.
Beans (dry)		1.0	Do not apply within 40 days of harvest.
Broccoli	2	1.0	7 days.
Cabbage	2	1.0	7 days.
Cantaloupe		0.5 (spray) 1.0 (dust)	14 days.
Cauliflower		0.75	Do not apply after edible parts start to form.
Cherries	2	2.5	Do not apply more than twice after shucks split. Do not apply within 21 days of harvest.
		3.0	Postharvest application only.
		0.75 lbs./ 100 gals. water	Spray all bark from ground to scaffold branches. Do not apply more than twice after shucks split. Do not apply within 21 days of harvest.
Clover		3.0	Do not feed treated forage to dairy animals or animals being fattened for slaughter. Do not use on forage to be sold commercially or shipped interstate.
Cotton		1.5	Do not apply after bolls open. Do not graze meat or dairy animals in treated fields.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

ENDOSULFAN

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Cotton (Cont.)		0.75	Do not apply after 25% of bolls are open. Do not graze meat or dairy animals in treated fields.
Cucumbers	2	1.0	No time limitations.
Eggplants	2	0.5	1 day.
		0.6 (dust)	7 days.
Filberts		2.0	No time limitations.
Grapes	2	1.5	7 days.
Lettuce (head)	2	1.0	Do not apply more than 3 times after thinning. Do not apply within 14 days of harvest. Remove outside leaves at harvest. Do not feed crop waste to livestock.
Macadamia nuts		15.0	No time limitations.
Melons	2	1.0 (spray) 1.5 (dust)	No time limitations.
Nectarines	2	4.0	Foliar application. 30 days. Do not apply more than twice during fruiting season.
		0.75/ 100 gals. water	Spray all bark from ground to scaffold branches. Do not apply within 21 days of harvest. or Thoroughly wet trunk and main branches. Do not apply more than twice during fruiting season. Do not apply within 30 days of harvest.
Oats		0.5	Do not apply after heads begin to form. Do not feed treated forage to dairy animals or animals being finished for slaughter.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

ENDOSULFAN

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Peaches	2	4.0	Foliar application. 30 days. Do not apply more than twice during fruiting season.
		0.75/ 100 gals. water	Spray all bark from ground to scaffold branches. Do not apply within 21 days of harvest.
			or Thoroughly wet trunk and main branches. Do not apply more than twice during fruiting season. Do not apply within 30 days of harvest.
Pears	2	2.5	7 days. Do not apply more than twice during fruiting season.
		2.0	Apply to orchard floor and ground around trees. Do not graze livestock on treated orchards. Do not apply after petal fall.
		3.0	30 days. Apply thoroughly to foliage and fruit. Do not apply more than once during fruiting season.
Pecans		10.0	Do not apply after shuck-split. Do not graze meat or dairy animals in treated groves.
Peppers	2	0.5 (spray) 1.0 (dust)	1 day.
Plums	2	2.5	7 days.
		0.75/ 100 gals. water	Spray on bark from scaffold branches to ground. Do not apply within 21 days of harvest.
Potatoes		2.5	No time limitations.
Prunes	2	2.5	7 days.
		0.75/ 100 gals. water	Spray on bark from scaffold branches to ground. Do not apply within 21 days of harvest.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

ENDOSULFAN

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Pumpkins	2	1.0	No time limitations.
Rye		0.5	Do not apply after heads begin to form. Do not feed treated forage to dairy animals or animals being finished for slaughter.
Safflower		1.0	Do not apply after flower heads open.
Soybeans		0.5 (spray) 0.6 (dust)	Do not apply after pods start to form. Do not feed treated threshings to livestock.
Squash (summer & winter)	2	1.0	No time limitations.
Strawberries	2	4.0	4 days. Do not reapply within 35 days when fruit is present.
		1.0	4 days. Do not reapply within 15 days or more than twice within a 35 day period when fruit is present.
		0.25/ 50 gals. water	Dip transplants prior to transplanting.
Sugar beets		1.0	Do not feed treated tops to livestock.
Sugar cane		0.45	Do not apply within 60 days of harvest. Do not apply more than 4 times per season. Do not feed bagasse or field trimmings to livestock.
Tomatoes (field & greenhouse)	2	1.0	1 day.
Tomatoes (greenhouse)	2	0.1/ 50,000 cu. ft.	Do not apply within 15 hours of harvest. Keep greenhouse tightly closed for 2 hours after application.
Walnuts		2.0	Do not apply after husks split.
Watercress	2	1.0	7 days.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

ENDOSULFAN

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Wheat		lbs. actual/A. 0.5	Do not apply after heads begin to form. Do not feed treated forage to dairy animals or animals being finished for slaughter.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

ENDOTHAL*

PRINCIPAL FORMULATIONS: Dipotassium salt, 5.1% and 10.1% granular; 22.1% and 40.3% liquid; disodium salt, 5% granular; 19.2% liquid; amine salt, 68% solution

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Alfalfa (seed crop only)		5.75	Preharvest desiccant. Apply 10 days before harvest. Do not graze treated areas or feed treated forage or threshings to livestock.
Beans, dry edible (seed crop only)		1.0	Preharvest desiccant. Apply 7 days before harvest. Do not graze treated areas or feed treated forage or threshings to livestock. Do not use seed for food or feed purposes.
Beets		6.55	Preemergence application. Soil incorporation at least 2 inches deep immediately prior to planting; or after planting but before beets emerge.
Clover (seed crop only)		5.75	Preharvest desiccant. Apply 10 days before harvest. Do not graze treated areas or feed treated forage or threshings to livestock.
Flax (seed crop only)		1.0	Preharvest desiccant. Apply 7 days before harvest. Do not graze treated areas or feed treated forage or threshings to livestock. Do not use seed for food or feed purposes.
Lespedeza (seed crop only)		1.0	Preharvest desiccant. Apply 7 days before harvest. Do not graze treated areas or feed treated forage or threshings to livestock. Do not use seed for food or feed purposes.
Soybeans (seed crop only)		1.0	Preharvest desiccant. Apply 7 days before harvest. Do not graze treated areas or feed treated forage or threshings to livestock. Do not use seed for food or feed purposes.

*Disodium 3,6-endoxohexahydrophthalate

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USDA Summary of Registered Agricultural Pesticide Chemical Uses

ENDOTHALL

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Spinach		2.19	Preemergence application only. (Injury may occur in light sandy soils.)
Sugar Beets		6.55	Preemergence application. Soil incorporation at least 2 inches deep immediately prior to planting; or after planting but before beets emerge.
		1.46	Post-emergence application. Apply when beets are in 3-6 leaf stage. Do not apply later than 40 days after emergence.
Trefoil (Seed crop only)		1.0	Preharvest desiccant. Apply 7 days before harvest. Do not graze treated areas or feed treated forage or threshings to livestock. Do not use seed for food or feed purposes.
Vetches (Seed crop only)		1.0	Preharvest desiccant. Apply 7 days before harvest. Do not graze treated areas or feed treated forage or threshings to livestock. Do not use seed for food or feed purposes.
Agricultural Premises:			
Lakes Ponds		13.5 lbs./ acre-foot of water (5 ppm)	Apply as a spray on the surface or injected below water surface. Water containing heavy vegetation should be treated in sections (1/2 of the pond at one time and treat other half about 5-7 days later.) Do not use fish from treated water for food or feed within 3 days after treatment. Do not use treated water for irrigation, agricultural sprays, or domestic purposes within 7 days after treatment.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

ETHION*

PRINCIPAL FORMULATIONS: 47.7%, 75.0% emulsifiable concentrate; 2.2% emulsion;
8.0% granular formulation; 4.0% dust

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Almonds	0.1 (almonds) 5.0 (almond hulls)	2.5 2.0	Do not apply after husk-split. 30 days. Do not apply more than once during fruiting period.
Apples	2.0	5.0 2.5	60 days. Do not apply more than 4 times during fruiting period. or 40 days. Do not apply more than twice during fruiting period. 40 days. Do not apply more than 4 times during fruiting period. or 30 days. Do not apply more than 3 times during fruiting period. or 20 days. Do not apply more than twice during fruiting period.
Apricots		1.6	Delayed dormant application only.
Beans	2.0	0.5 (spray) 0.8 (dust) 1.0 (spray) 1.6 (dust) 1.5	2 days. Do not feed treated bean foliage to livestock. 4 days. Do not feed treated bean foliage to livestock. 10 days. Do not make more than one application after the edible parts have formed. Do not feed treated bean foliage to livestock.
Beans (seed)		1.0 oz./cwt. slurry treat- ment	Do not use as food or feed.
Cherries		2.5	Postharvest or dormant application only.

*O,O,O',O'-tetraethyl S,S'-methylene bis-phosphorodithioate

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ETHION

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Corn (field)		1.0	50 days. Do not apply more than once after ears from. Do not feed treated forage to livestock.
Cotton		1.6	Do not apply after bolls open. Do not graze dairy or meat animals in treated fields.
Cucumbers	0.5	0.5	No time limitations.
Eggplants	1.0	0.5	No time limitations.
Figs		2.0	Dormant application only.
Garlic	1.0	2.0	Apply to furrow at time of planting.
Grapes	2.0	1.25 (spray)	60 days.
			or
			30 days. Do not apply more than twice during fruiting period.
		2.25 (spray)	30 days. Single application.
Grapefruit	2.0	1.2 (dust)	30 days. Do not apply more than 3 times during fruiting period.
			or
			15 days. Do not apply more than twice during fruiting period.
		7.5	No time limitations. Do not repeat application within 90 days.
Lemons	2.0	10.0	30 days.
		7.5	21 days. Do not apply more than once per season.
Limes	2.0	7.5	Do not apply more than once per season. Do not apply within 21 days of harvest.
Melons	2.0	1.0 (spray)	No time limitations.
		1.6 (dust)	

USDA Summary of Registered Agricultural Pesticide Chemical Uses

ETHION

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Nectarines		lbs. actual/A. 1.5	Apply during dormancy or late dormancy. Do not apply after foliage or edible parts start to form.
Onions Green Bulb	1.0	2.0	Apply to furrow at time of planting.
Oranges	2.0	7.5	No time limitations. Do not repeat application within 90 days.
		10.0	30 days.
Peaches	1.0	1.75 (spray) 2.4 (dust)	30 days. Do not apply more than twice during fruiting season.
Peanuts		1.0	Do not feed forage from treated fields to dairy animals or animals being finished for slaughter. Do not allow livestock to graze treated areas before or after harvest.
Pears	1.0	5.0	60 days. Do not apply more than 3 times after first cover spray.
		2.7	35 days. Do not apply more than twice during fruiting period.
		2.5	30 days. Do not apply more than 3 times after first cover spray.
Peppers	1.0	0.5	No time limitations.
Pimentoes	1.0	0.5	No time limitations.
Plums	2.0	2.5	45 days. Do not apply more than twice during fruiting period.
		1.75	21 days. Do not apply more than 3 times during fruiting period.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

ETHION

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Prunes	2.0	2.5	45 days. Do not apply more than twice during fruiting period.
		1.75	21 days. Do not apply more than 3 times during fruiting period.
Sorghum		0.5	Do not apply later than 10 days after first bloom except on sorghum grown only for seed. Some leaf burning may occur on phosphate sensitive varieties. Do not apply more than twice per growing season. Do not graze treated areas or use treated crops for silage.
Strawberries	2.0	1.0 (spray) 1.2 (dust)	2 days.
Summer squash	0.5	0.5	No time limitations.
Tangeloes	2.0	7.5	No time limitations. Do not repeat application within 90 days.
Tangerines	2.0	7.5	No time limitations. Do not repeat application within 90 days. Do not apply more than twice per season.
Tomatoes	2.0	0.5 (spray) 0.8 (dust)	2 days.
		1.2	28 days. Do not apply more than once after fruit begins to form.
Walnuts		3.2	Dormant or delayed dormant application only.
		2.5	Do not apply after husk-split. Do not apply more than twice during fruiting season.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

ETHOXY ETHYL MERCURY CHLORIDE - HYDROXYETHYL MERCURY CHLORIDE MIXTURE

PRINCIPAL FORMULATIONS: 5% wettable powder

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Potatoes		1 lb./25 gals. water	Preplanting seed piece treatment. Soak seed potatoes 30-60 seconds and dry before planting.
Sugarcane		1 lb./25 gals. water	Dip ends of cane before planting.

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5-ETHOXY-3-TRICHLOROMETHYL-1,2,4-THIADIAZOLE

PRINCIPAL FORMULATIONS: 12% emulsifiable concentrate containing 1 lb. per gallon

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Cotton		lbs. actual/A. 0.5	Apply in furrow at time of planting. Do not graze dairy or meat animals in treated fields. Do not feed gin waste to livestock. Do not plant treated fields to crops other than cotton.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

ETHYL DI-n-PROPYLTHIOLCARBAMATE*

PRINCIPAL FORMULATIONS: 78.0% liquid; 5.0%, 10.0%, 20.0% and 25.0% pelleted formulations; 75% emulsifiable concentrate; 10% granular

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Alfalfa		4.0	Preplanting soil incorporation. No limitations.
		3.0	Preemergence or postemergence application by flood irrigation. No limitations.
Asparagus		3.0	Apply when beds are being worked before or after cutting season. Do not apply within 30 days of harvest.
Beans (dry, snap, and pole)		4.0	Preplant, preemergence, or postemergence soil incorporation. Do not apply after edible parts start to form. Do not graze or feed treated vines to livestock. Do not apply to lima beans, blackeyed peas, soybeans, or flat pod beans (except romano).
Clovers		4.0	Preplant soil incorporation. No limitations.
Clovers (Ladino)		3.0	Postemergence application by flood irrigation. Do not apply within 45 days of harvest or grazing.
Corn (field & sweet)		4.0	Preplanting or preemergence soil incorporation. Do not plant seed deeper than 2 inches. Do not use in hybrid corn grown for seed.
Cotton		2.0	Apply at time of planting with subsurface applicator in bands 4 inches from seed row.
Flax		4.0	Preplant soil incorporation.
Lespedeza		4.0	Preplant soil incorporation. No limitations.

*EPTC: Proprietary name: "Eptam"
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ETHYL DI-n-PROPYLTHIOLCARBAMATE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Peas (green processing)		2.0	Preplanting soil application.
Pineapples		6.0	Preplanting soil incorporation. Do not apply more than twice. Do not plant within 6 months after last application.
Potatoes		6.0	Preplant soil incorporation. or Postemergence soil incorporation (lay- by). Do not apply later than 6 weeks after planting.
Potatoes (white)		4.0	Preplanting soil application or at drag- off time or at last cultivation. Do not apply within 45 days of harvest.
Rice (levees)		3.0	Apply at time of making new borders or after weed growth is destroyed on old levees.
Safflower		3.0	Preplant soil incorporation. (Adjust dosage for band treatment).
Strawberries		5.0	Prebloom or postharvest application only.
Sugar beets		3.0	Preplanting soil incorporation immediately prior to planting. or Postemergence application at time of last cultivation. Do not apply within 2 months of harvest. For use east of Rocky Mountain only.
Sunflower		3.0	Preplanting soil incorporation. Plant crop the same day.
Sweet potatoes		7.5	Apply over freshly planted slips not later than one week after planting (adjust dosage for band application).
Table beets		2.0	Preplanting soil incorporation.

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ETHYL DI-n-PROPYLTHIOLCARBAMATE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Trefoil		lbs. actual/A. 4.0	Preplant soil incorporation. No limitations.

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S-ETHYL HEXAHYDRO-1H-AZEPINE-1-CARBOTHIOATE

PRINCIPAL FORMULATIONS: 5% granular; 71% emulsifiable concentrate containing 6 lbs./gal.

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Rice		lbs. actual/A. 3.0	Preplanting application for water seeded rice. Disc and harrow soil incorporated, flooded then sown or omit soil incorporation and keep flooded. Do not contaminate domestic waters.

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N-ETHYLMERCURI-1,2,3,6-TETRAHYDRO-3,6-endo-
-METHANO-3,4,5,6,7,7-HEXACHLOROPHTHALIMIDE*

PRINCIPAL FORMULATIONS: 10.34% emulsifiable concentrate;
10.00% wettable powder

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Flax		1.5 oz./bu.	Seed treatment only. Do not use treated seed for food or feed.
Grains:			
Barley		1.5 oz./bu.	Seed treatment only. Do not use treated seed for food or feed.
Oats			
Rye			
Wheat			

*Proprietary name: "Emmi"

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ETHYLENE DIBROMIDE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Cucumbers	30	36-108	Allow 1-3 weeks to lapse between time of application and planting.
Cucurbits		36-54	Allow 1-2 weeks to lapse between time of application and planting.
Eggplant	50	36-108	Allow 1-3 weeks to lapse between time of application and planting.
Fruit tree sites:			
Almonds		180	Allow 1-3 weeks to lapse between time of application and planting.
Apples			
Apricots			
Avocado			
Bananas			
Cashews			
Cherries	25		
Chestnuts			
Dates			
Figs			
Filberts			
Grapefruit	10		
Guavas	10		
Hazelnuts			
Hickory Nuts			
Kumquats	10		
Lemons	10		
Limes	10		
Mangoes	10		
Nectarines			
Olives			
Oranges	10		
Papayas	10		
Passion fruit			
Peaches			
Pears			
Pecans			
Persimmons			
Plums	25		
Pomegranate			
Prunes	25		
Quinces			
Tangeloes	10		
Tangerines	10		
Walnuts			

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ETHYLENE DIBROMIDE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Lettuce	30	36-108	Allow 1-3 weeks to lapse between time of application and planting.
Melons	75	36-108	Allow 1-3 weeks to lapse between time of application and planting.
Mushrooms		0.05 lbs. actual/cu.yd.	Casing soil treatment only.
Okra	50	108	Preplant application in muck soils only.
		36-72	Allow 1-2 weeks to lapse between time of application and planting.
Parsnips	75	36-108	Allow 1-3 weeks to lapse between time of application and planting.
Peas		36-77	Allow 1-2 weeks to lapse between time of application and planting.
Peppers	30	36-108	Allow 1-3 weeks to lapse between time of application and planting.
Pineapples	40	72-104	When using high dosage, allow 3 days to lapse between time of application and planting. Use 72 lbs./A. as a post-planting side dressing 6-8 inches on both sides of row.
		216	Preplanting soil application. Do not plant within 2 days after treatment.
Potatoes (sweet)	50	36-108	Allow 1-3 weeks to lapse between time of application and planting.
Potatoes (white)	75	90	For use only in Idaho and Wisconsin where postharvest fumigation with methyl bromide is not practiced. Apply as a split application in the fall of 60 lbs./A. followed in 10 days by 30 lbs./A.
		36-72	Allow 1-2 weeks to lapse between time of application and planting.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

ETHYLENE DICHLORIDE MIXTURE

PRINCIPAL FORMULATIONS: Mixture containing 68.5% ethylene dichloride, 29% carbon tetrachloride, 2.5% sulfur dioxide

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Corn		1 gallon/ 1800 cu.ft.	Used for conditioning grain in cars on route to market.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

ETHYLENE GLYCOL BIS (TRICHLOROACETATE)

PRINCIPAL FORMULATIONS: 43% emulsifiable concentrate

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Cotton		20 lbs./100 gals. of oil	Spot treatment as a directed spray to base of weeds when 12 inches tall. Do not apply to crop. Do not graze treated fields or feed gin waste to livestock.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

ETHYLENE OXIDE

PRINCIPAL FORMULATIONS: 10.0% in pressurized cylinders with 90.0% liquid CO₂

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Commodity Fumigation		lbs./1000 cu.ft. unless otherwise indicated	
Beans (dry)		2.0	Expose to fumigation for 48 hours. Do not use treated beans for seed.
Copra	50.0	2 applications of 75 p.p.m. each*	No limitations.
Grain:			
Barley		3.0 lbs./ 1000 bu.	Expose to fumigation for 72 hours.
Corn			
Oats			
Rice			
Rye			
Wheat			
Nuts:			
Almonds		3.0	Expose to fumigation for 24 hours.
Black Walnuts	50.0		
Cashews			
Chestnuts			
Filberts			
Hazelnuts			
Hickory Nuts			
Pecans			
Walnuts			
Peas (all)		2.0	Expose to fumigation for 24 hours.
Spices (whole)	50.0	0.21 lbs./ 100 lbs.	Expose to fumigation for 24 hours in tight fumigation chamber.

*Applications are made in ships' holds while enroute to U.S. ports of entry

USDA Summary of Registered Agricultural Pesticide Chemical Uses

GIBBERELLIC ACID (and Na or K salts)

PRINCIPAL FORMULATIONS: 0.5% liquid concentrate; 0.88% dust; 2% solution;
10% soluble powder

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Beans		gms. actual/A. 1.5 grams actual per 100 lbs. seed	Seed treatment only.
Cherries (sour)		30 grams act. per acre	Apply between 10-14 days after bloom. Do not apply within one month of harvest.
Cotton		3.0	Do not apply after mid-bloom.
		1.5 grams actual per 100 lbs. seed	Seed treatment only.
Grapes		6.0	For cluster loosening, apply when cluster forms in 1-3 inches long, about 2-3 weeks before bloom.
		16.0	For berry size increase, apply when shatter stage begins about 7-10 days after bloom and complete application before berries are 3/16 inches in diameter.
Lemons		10 ppm (spray)	Apply in Oct.-Dec. before fruit yellowing as a single application. Do not apply within 1 month of harvest.
Oats		1.5 grams actual per 100 lbs. seed	Seed treatment only.
Oranges (navel)		40 grams per acre (20 ppm)	Preharvest application immediately after marketable color develops (Dec. to Jan.). Do not apply immediately before, during, or immediately after flowering season. Do not apply within 10 days of harvest.

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GIBBERELIC ACID (and Na or K salts)

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Peas		gms. actual/A. 1.5 grams actual per 100 lbs. seed	Seed treatment only.
Potatoes (seed pieces)		Dip pieces in 1.0 ppm solution	No time limitation.
Rye		1.5 grams actual per 100 lbs. seed	Seed treatment only.
Soybeans		1.5 grams actual per 100 lbs. seed	Seed treatment only.
Wheat		1.5 grams actual per 100 lbs. seed	Seed treatment only.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

ISOPROPYL N-(3-CHLOROPHENYL) CARBAMATE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Onions:		lbs. actual/A.	
Seeded		8.0	Preemergence application or postemergence application when onions are in "loop" stage. Repeat when in 3-4 leaf stage and 1 month later. Do not apply when onions are in "flag" stage or within 1 month of harvest.
Sets		8.0	Preemergence application same day onions are set. Postemergence application as a directed spray to lower 1-2 in. of base after onions are 6 in. tall, or have 3 or more true leaves.
Peas		4.0	Preplanting application 2 days before planting and disc into upper 4 in. of soil.
		6.6	Preemergence application.
Pepper		6.0	Preemergence application.
Potatoes	50	1 lbs./60,000 lbs. tubers (1000 bu.)	Sprout inhibition. Apply after curing process (2 weeks after harvest) and before sprouting. With aerosol generator inject into air stream and recirculate through storage bin 48 hours. Follow with normal ventilation practice. Do not use on seed potatoes.
		0.625 lbs./60,000 lbs. tubers (1000 bu.)	Sprout inhibition. Apply to washed tubers after harvest and curing in storage for 2 weeks or more. Do not apply to seed potatoes.
Radish		2.0	Preemergence application.
Raspberries		6.0	Apply as a directed spray from late fall to early spring or at time of planting.

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ISOPROPYL N-(3-CHLOROPHENYL) CARBAMATE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. Actual/A.	
Rice		8	Preemergence application. Rice should be seeded not less than 1 inch deep. Apply when grass is just emerging, or is in first leaf stage.
Soybeans		8	Preemergence application. Plant seed at least 1 inch deep.
Spinach		8	Preemergence application. (Spring-planted crop).
		6	Preemergence application. (Fall-planted crop).
		2	Post-emergence application. Do not apply after 2 leaves have formed.
Strawberries		3	Dormant application. or Post-emergence application. Make first application 2 weeks after planting; repeat in mid-summer before runners set. Make an additional application in late fall. Do not apply during flower, fruiting or runner stage. Do not apply to ever-bearing varieties.
Sugar Beets		6	Preemergence application.
Sweet Potatoes		2.0	Layby application; apply broadcast over crop, granular formulations only.
		4.5	Post-transplant application within 1 day after setting. Apply only as band application at proportional rate. or Layby application; apply to middles only as band application at proportional rate.
Tomatoes		4.0	Post-emergence application at layby (granular formulations only).
Turnip Greens		2.0	Preemergence application.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

LINSEED OIL

PRINCIPAL FORMULATIONS: With various toxicants as animal remedies

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Animals: Beef Cattle Dairy Cattle Goats Sheep Swine		10.0%	Formulated with other ingredients and applied locally as a screw-worm or ear tick remedy.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

LINURON*

PRINCIPAL FORMULATIONS: 50% wettable powder

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Carrots	1	2.0	Preemergence application or postemergence application when carrots are 2-6 inches tall. Do not replant to other crops within 4 months after treatment.
Corn (field)	1.0 (fodder or forage)	2.5	Preemergence soil application.
Corn (sweet)	1.0 (fodder or forage)	2.5	Preemergence application; plant seeds 1.75 inches deep.
		2.0	Postemergence application as a directed spray, when corn is 15 inches tall or taller. Do not apply within 60 days of harvest. Do not plant to any crop within 4 months after treatment.
Cotton		1.5	Postemergence application as a directed spray at time of last cultivation when cotton is 20 or more inches tall. Do not plant to any crop within 4 months after treatment. Do not apply within 60 days of harvest. Do not graze treated fields. Do not apply on pima varieties.
Parsnips		1.5	Preemergence application. Do not apply to light soils. Do not replant treated area in other crops within 4 months after treatment. Do not use tops from treated area for food or for feed for dairy or meat animals.
Potatoes	1	2.0	Preemergence to crop planted at least 2 inches deep. Do not replant to other crops within 4 months after treatment.

*3-(3,4-dichlorophenyl)-1-methoxy-1-methyl urea

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LINURON

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Soybeans	1.0 (dry or succulent) (forage & hay)	lbs. actual/A. 3.0	Preemergence application. Do not plant crops other than corn or soybeans, within 4 months after treatment.

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MALATHION*

PRINCIPAL FORMULATIONS: Emulsifiable concentrate containing 5 lbs. per gallon; 25% wettable powder; 4% and 5% dusts

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Alfalfa	135	1.5 2.5 (dust) 2.0 (spray)	No time limitations. 7 days. Do not apply during full bloom.
Almonds		8.0	No time limitations.
Anise	8	1.5	7 days. Apply only to crops to be harvested fresh. Do not apply to crops grown for seed or oil.
Apples	8	15.0	3 days. May injure foliage on some varieties.
Apricots	8	10.0	7 days. Full coverage spray.
Artichokes		3.0	10 days.
Asparagus	8	1.25	1 day.
Avocado	8	9.0	7 days.
Barley	8	1.25	7 days. Apply as dust formulation or diluted spray.
		0.6	7 days. Apply as undiluted (low volume) concentrate spray.
Barley (seed)		2.0 oz./bu.	Do not use as food or feed.
Beans	8	1.75	1 day.
Beans (seed)		2.0 oz./bu.	Do not use as food or feed.
Beets	8	2.5	7 days.
Blackberries	8	4.0	1 day.

*O,O-dimethyl dithiophosphate of diethyl mercaptosuccinate

USDA Summary of Registered Agricultural Pesticide Chemical Uses

MALATHION

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Blackeyed peas	8	2.5	3 days.
Blackeyed peas (seed)		2.0 oz./bu.	Do not use as food or feed.
Blueberries	8	2.5	1 day.
		0.75 (spray) 1.0 (dust)	No time limitations.
Boysenberries	8	4.0	1 day.
Broccoli	8	3.0 (dust) 2.5 (spray)	3 days.
Brussels sprouts	8	2.5	7 days.
Cabbage	8	3.0 (dust) 2.5 (spray)	7 days.
Carrots	8	2.0	7 days.
Cauliflower	8	3.0 (dust) 2.5 (spray)	7 days.
Celery	8	1.5	7 days.
Cherries	8	8.0	3 days. May injure foliage of some varieties.
Chestnuts		5.0	Do not apply after shuck-split.
Clover	135	1.5	No time limitations.
		2.5 (dust) 2.0 (spray)	7 days. Do not apply during full bloom.
Collards	8	2.5	7 days.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

MALATHION

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Corn Field	8 on for- age; 2 on ear with husk re- moved	1.6 (dust)	5 days (grain or forage use).
Pop		1.0 (spray)	
Sweet		10.0 oz./1000 bu. mixed with grain	Postharvest treatment only.
		5.0 oz./1000 sq. ft. of grain surface	Postharvest treatment only.
Corn (seed)		2.0 oz./bu.	Do not use as food or feed.
Cotton	2 (cotton- seed)	4.0	No time limitation. Apply as dust formu- tions or diluted sprays.
		1.0	No time limitations. Apply as undiluted (low volume) concentrate sprays.
Cotton (seed)		2.0 oz./bu.	Do not use as food or feed.
Cowpeas	8	2.5	3 days.
Cowpeas (seed)		2.0 oz./bu.	Do not use as food or feed.
Cranberries	8	2.5	3 days.
Cucumbers	8	2.25 (dust) 1.75 (spray)	1 day. Greenhouse aerosol formulation.
Cucumbers (greenhouse)	8	0.1 lb./50,000 cu. ft.	1 day. Greenhouse aerosol formulation.
Currants	8	2.0	1 day.
Dandelion	8	2.5	7 days.
Dates	8	2.0	7 days.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

MALATHION

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Dewberries	8	4.0	1 day.
Eggplant	8	3.5	3 days.
Endive (escarole)	8	2.0	7 days.
Endive (greenhouse)	8	0.1 lb./50,000 cu.ft.	7 days. Greenhouse aerosol.
Figs	8	2.5 (spray)	3 days. Formulated with 2 gallons of molasses as a bait spray.
		2.0 (dust)	3 days.
Filberts		3.0	No time limitations.
Garlic	8	2.0	3 days.
Gooseberries	8	2.0	3 days.
Grapefruit	8	25.0	7 days. Do not apply during full bloom.
		0.75	3 days. Bait sprays.
Grapes	8	2.75	3 days. Emulsion may cause injury to foliage on some varieties.
Grass & Grass Hay	135 (grass & grass hay)	2.0	No time limitations. Apply as dust form- ulations.
		1.25	No time limitations. Apply as diluted sprays.
		0.8	No time limitations. Apply as undiluted (low volume) concentrate sprays.
Guava	8	0.75	2 days.
Hops		1.25	7 days.
Horseradish	8	2.5	7 days.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

MALATHION

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Kale	8	3.0 (dust) 2.5 (spray)	7 days.
Kohlrabi	8	2.0	7 days.
Kumquats	8	25.0	7 days. Do not apply during full bloom.
		0.75	3 days. Bait spray.
Leeks	8	2.0	3 days. Bait spray.
Lemons	8	25.0	7 days. Do not apply during full bloom.
		0.75	3 days. Bait spray.
Lettuce	8	4.0 (dust) 2.0 (spray)	14 days (leaf lettuce); 7 days (head lettuce).
Lettuce (greenhouse)		0.1 lb./50,000 cu. ft.	10 days. Greenhouse aerosol.
Limes	8	25.0	7 days. Do not apply during full bloom.
		0.75	3 days. Bait spray.
Lentils		1.0	7 days.
Loganberries	8	4.0	1 day.
Macadamia nuts		15.0	No time limitations.
Mangoes	8	0.75	2 days. Bait spray.
Melons	8	2.25 (dust) 1.75 (spray)	1 day.
Mushrooms	8	1.6	1 day.
Mustard	8	3.0 (dust) 2.5 (spray)	7 days.
Nectarines	8	10.0	7 days. Full coverage spray.
Oats	8	1.25	7 days. Apply as dust formulations or diluted sprays.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

MALATHION

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Oats (cont.)	8	0.6	7 days. Apply as undiluted (low volume) concentrate sprays.
Oats (seed)		2 oz./bu.	Do not use as food or feed.
Okra		1.5	Do not apply after pods form.
Onions (including green onions)	8	2.0	3 days for green onions.
Oranges	8	25.0	7 days. Do not apply during full bloom.
		0.75	3 days. Bait spray.
Papayas		1.25 lbs. act./ 100 gals. water	Thorough application. Repeat as necessary. Do not apply within 30 days of harvest.
Parsley	8	2.0	7 days.
Parsnips	8	2.0	7 days.
Passion fruit	8	0.75	2 days. Bait spray.
Peaches	8	9.0	7 days. Full coverage spray.
Peanuts	8 (on shelled peanuts) 0 (on hay)	8 oz. actual per 1000 sq. ft. of surface	Apply in and around warehouse before peanuts are placed in storage.
		25 oz. actual per 15 tons of peanuts in shell	Apply to peanuts as they are placed into storage.
		7 oz. actual per 1000 sq. ft. of surface	Apply to surface of peanuts after they are stored.
		1.0	30 days.
Peanuts (seed)		2.0 oz./bu.	Do not use as food or feed.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

MALATHION

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Pears	8	15.0	1 day.
Peas	8	2.5	3 days.
Peas Hay Vines	8	1.25	7 days if forage is to be fed to live- stock.
Peas (seed)	8	2.0 oz./bu.	Do not use as food or feed.
Pecans	8	12.5	No time limitations.
Peppers	8	1.5	3 days.
Peppermint	8	1.0	7 days.
Pineapples	8	5.0	7 days.
Potatoes	8	3.0	No time limitations.
Plums	8	10.0	3 days. Full coverage spray.
Prunes	8	10.0	3 days. Full coverage spray.
Pumpkins	8	2.0	3 days.
Quince	8	15.0	3 days.
Radishes	8	2.0	7 days.
Radishes (greenhouse)	8	0.1 lb./50,000 cu. ft.	1 day. Greenhouse aerosol formulation.
Raspberries	8	4.5	1 day.
Rice	8	1.6	7 days.
Rice (seed)		2.0 oz./bu.	Do not use as food or feed.
Rutabagas	8	2.5	3 days.

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MALATHION

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Rye	8	1.25	7 days.
		0.6	Apply as dust formulations or diluted sprays. 7 days. Apply as undiluted (low volume) concentrate sprays.
Rye (seed)		2.0 oz./bu.	Do not use as food or feed.
Safflower		1.25	3 days.
Salsify	8	2.0	7 days.
Shallots	8	2.0	3 days.
Small Grains:			
Barley	8	10.0 oz./1000	Postharvest storage treatment only.
Oats	8	bu. mixed	
Rice	8	with grain	
Rye	8		
Sorghum	8	5.0 oz./1000	Postharvest storage treatment only.
Wheat	8	sq. ft. of grain surface	
Small Grains (seed)		2.0 oz./bu.	Do not use as food or feed.
Spearmint	8	1.0	7 days.
Sorghum (grain)	8	10.0 oz./1000 bu. mixed with grain	Postharvest storage treatment only.
		5.0 oz./1000 sq. ft. of grain surface	Postharvest storage treatment only.
Sorghum (seed)		2.0 oz./bu.	Do not use as food or feed.
Soybeans		1.75	1 day.
		2.0	3 days.
Soybeans (seed)		2 oz./bu.	Do not use as food or feed.

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MALATHION

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Spinach	8	2.0	7 days.
Squash	8	2.25 (dust)	1 day.
Summer		1.75 (spray)	
Winter			
Strawberries	8	2.0	3 days.
Sugar beets		2.5	7 days if tops are to be used for food or feed.
Sweet potatoes		2.0	No time limitations.
Swiss chard	8	2.0	7 days.
Tangeloes	8	25.0	7 days. Do not apply during full bloom.
		0.75	3 days. Bait spray.
Tangerines	8	25.0	7 days. Do not apply during full bloom.
		0.75	3 days. Bait spray.
Tomatoes	8	3.5	5 days.
		2.0	1 day.
Tomatoes (greenhouse)		0.15 lbs./ 50,000 cu.ft.	15 hours.
Turnips (including tops)	8	3.0	3 days.
Vegetables:			
Asparagus	8	3.0 (dust)	Apply uniformly over soil around base of plants. (Worked into soil or left on surface).
Beans	8		
Beets	8		
Blackeyed peas	8		
Broccoli	8		
Brussels sprouts	8		
Cabbage	8		
Cantaloupes	8		

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MALATHION

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Vegetables (cont.)			
Carrots	8	3.0 (dust)	Apply uniformly over soil around base of plants. (Worked into soil or left on surface).
Cauliflower	8		
Celery	8		
Collards	8		
Corn	8		
Cowpeas	8		
Hay			
Peas			
Vines			
Cucumbers	8		
Eggplants	8		
Endive	8		
Garlic	8		
Horseradish	8		
Kale	8		
Kohlrabi	8		
Leeks	8		
Lettuce	8		
Melons	8		
Mustard greens	8		
Okra			
Onions	8		
Parsnips	8		
Peas:	8		
Hay			
Peas			
Vines			
Peppers	8		
Pimientos	8		
Potatoes	8		
Pumpkins	8		
Radishes	8		
Rutabagas	8		
Salsify	8		
Shallots	8		
Spinach	8		
Squash	8		
(summer)			
Squash	8		
(winter)			
Sweet potatoes			
Swiss chard	8		

USDA Summary of Registered Agricultural Pesticide Chemical Uses

MALATHION

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Vegetables (cont.)			
Tomatoes	8	3.0 (dust)	Apply uniformly over soil around base of plants. (Worked into soil or left on surface.)
Turnips:	8		
Roots			
Tops			
Watermelons	8		
Vetch		2.0	7 days (harvest or pasturing).
Walnuts	8	12.5	No time limitations.
Water Cress	8	2.0	7 days.
Water Cress: (greenhouse)		0.1 lb./ 50,000 cu. ft.	7 days. Greenhouse aerosol.
Wheat	8	1.25	7 days. Apply as dust formulations or diluted sprays.
		0.6	7 days. Apply as undiluted (low volume) concentrate sprays.
Wheat (seed)		2.0 oz./bu.	Do not use as food or feed.
Animals:			
Beef cattle	4 in meat & meat by- products	1.25% (in water)	Dip or spray. Do not apply to lactating dairy animals.
		2.0% (in oil)	Apply by back-rubbers. Do not apply to dairy animals.
		5.0% (dust)	Apply directly to animals. Do not apply to lactating dairy animals.
Dairy cattle (non- lactating)	0 in milk	1.25% (in water)	Dip or spray. Do not spray during lactation or within two weeks of freshening. Do not dip within 2 months of freshening. Do not apply to calves under one month of age.

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MALATHION

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Dairy Cattle (non-lactating) (cont.)	0 in milk	lbs. actual/A. 5.0%	Thorough application. Do not apply during lactation or within 2 weeks of freshening.
Dairy Cattle (lactating)	0 in milk	5.0% (dust) 1.5 oz./head or 4.0% (dust) 2.0 oz./head	Apply to back and neck of animals. Do not apply within 5 hours of milking or during milking. Repeat application at 10-14 day intervals if needed.
Poultry	4 in meat & meat by- products 0 in eggs	0.7% (in water) 4.0% (dust)	Spray or dip. No time limitations. Thorough application directly to birds. No time limitations.
Goats Sheep	4 in meat & meat by- products	0.6% (in water) 5.0% (dust)	Dip or spray. No limitation. Do not apply to milk goats. Thorough application to animal by hand or power duster. Do not apply to lactating milk goats.
Swine	4 in meat & meat by- products	0.6% (in water) 5.0% (dust)	Dip or spray. No time limitation. Thorough application. No time limitation.
Agricultural Premises including:			
Barns		2.5% (in water)	Apply liberally as a residual spray. Do not contaminate milk, milking equipment, feed, or drinking water.
Dairy Barns			
Barnyards		1.0%	Bait spray. Spot application by spraying, or brushing. Do not contaminate milk, milking equipment, feed, or drinking water.
Milk rooms			

USDA Summary of Registered Agricultural Pesticide Chemical Uses

MALATHION

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Agricultural Premises (cont.)		lbs. actual/A. 1.25%	Wet bait formulation. Do not contaminate feed, milk, milking equipment, or drinking water.
		3.5%	Dry bait formulation. Apply 3/4 gms. per 1000 sq. ft. of floor space. Do not contaminate milk, milking equipment, feed, or drinking water.
Poultry Houses		0.25 lbs./ 100 sq. ft.	Dust or spray. Apply to litter, floor, and walls.
		4.0%	Roost paint or surface spray. Apply one pint per 150 feet of roost.
Poultry Ranges		1.1	Full-coverage application 1 day prior to placing poultry on range. Repeat every 2-3 weeks. Do not contaminate feed or drinking water.
Grain Bins Feed Rooms Etc.		2.5%	Apply liberally as a residual spray. Do not contaminate feed.
Greenhouse		0.15 lbs./ 50,000 cu. ft.	Greenhouse aerosol formulation.
General:			
Ant Mounds		0.1%	Apply liberally to mounds. Saturate and mix loose earth in top of mound.
Fogging		1.5%	Formulated in combination with other insecticides. Apply by fog generators.
Uncultivated Land		2.0	Apply to ditchbanks, wasteland, idle land, etc. for grasshopper control.
		2.0	Wet or dry bait formulations. Apply 0.5 pounds per 1000 sq. ft. Do not apply in areas accessible to babies and small children.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

MALEIC HYDRAZIDE*

PRINCIPAL FORMULATIONS: 58% liquid; 48.3% wettable powder. Used in sodium and diethanolamine salts

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Beans green dry		4.0	Preplant application in spring, plow 4-8 days later, prepare land and plant immediately.
Beets		4.0	Preplant application in spring, plow 4-8 days later, prepare land and plant immediately.
Citrus (young non- bearing trees in Florida)			
Grapefruit		3.0	Induce dormancy. Spray between Nov. 1-15.
Kumquats			Repeat treatment 6-8 weeks later. Do
Lemons			not spray trees within the year in which
Limes			fruit to be harvested is set.
Oranges			
Tangeloes			
Tangerines			
Corn field sweet		4.0	Preplanting application in spring, plow 4-8 days later, prepare land and plant immediately.
Lima beans		4.0	Preplant application in spring, plow 4-8 days later, prepare land and plant immediately.
Onions			
Dry bulb	15	2.0	Sprout inhibitor. Apply 1-2 weeks before harvest.
Pasture		15.0	Onion and garlic control. Apply in spring or fall when 95% bulbs have started growth. Do not pasture livestock, in, or cut hay from treated areas.

*1,2-dihydropyridazine-3,6-dione; MH
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MALEIC HYDRAZIDE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Peas	50 (160 in potato chips)	lbs. actual/A. 4.0	Preplant application in spring, plow 4-8 days later, prepare land and plant immediately.
Potatoes		3.0	Sprout inhibitor. Apply 4-6 weeks before harvest. Do not use on seed potatoes.
		4.0	Preplant application in spring, plow 4-8 days later, prepare land and plant immediately.
Strawberries		0.75	Runner inhibitor. Apply not later than 1 month after harvest and no more than 2-3 sprayings per season. Do not use on everbearing varieties or while fruit is present.
Sugar beets		4.0	Preplant application in spring, plow 4-8 days later, prepare land and plant immediately.
Tomato		4.0	Preplant application in spring, plow 4-8 days later, prepare land and plant immediately.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

MANEB*

PRINCIPAL FORMULATIONS: 70% and 80% wettable powder
3.5%, 5.6%, 6.0%, 7.0%, and 8.0% dusts

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Almonds	0.1	7.5	California. Do not apply later than 5 weeks after petal fall. If applied beyond petal fall, do not feed almond hulls to dairy animals or animals being finished for slaughter.
Apples	7	8.4	No time limitations.
Apricots	10	10.0	14 days.
Asparagus		2.4	Postharvest application only or apply to young plantings which will not be harvested.
Bananas	15 (on peel) 2 (in pulp)	4.0 0.46% (in water)	No time limitations. Postharvest dip. No time limitations.
		0.375% (in water)	Postharvest spray. No time limitations
Beans, dry	7	3.2	No time limitations.
Beans, succulent	10	3.2	4 days.
Blackberries		3.2	Do not apply after bloom.
Broccoli	10	3.2 (spray) 4.0 (dust)	Remove residues by washing or trimming if application is made within 3 days of harvest.
Brussels sprouts	10	2.8	No time limitations.
Cabbage	10	1.8 (spray) 2.6 (dust)	7 days.
Carrots	7	3.0	No time limitations.
Cauliflower	10	2.8	No time limitations.

*Manganous ethylene bisdithiocarbamate
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MANEB

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Celery	10	lbs. actual/A. 3.2 (spray) 2.8 (dust)	No time limitations. Remove excess residues by stripping, trimming and washing.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

MANEB

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Cherries		8.0	Petal fall.
Cotton		3.5	Seed row treatment at planting time only.
Cranberries	7	7.5	Do not apply later than 4 weeks after mid-bloom.
		4.8	30 days.
Cucumbers	7	3.0	No time limitations.
Eggplant	7	3.0	No time limitations.
Endive	10	2.4 (spray)	7 days.
		3.2 (dust)	Remove residues by washing or other effective means.
Figs	7	3.0	10-20 days.
Grapes	7	1.5	7 days.
		4.0	10 days after bloom.
Kohlrabi	10	2.8	No time limitations.
Lettuce	10	2.4 (spray)	7 days.
		3.2 (dust)	Remove residues from head lettuce by stripping and trimming, and from leaf lettuce by washing or other effective means.
Melons	7	4.0	No time limitations.
Nectarines	10	10.0	14 days.
Onions	7	3.0	No time limitations.
Peaches	10	10.0	If applied within 14 days of harvest, remove residues by brushing. Do not apply within 2 days of harvest.
Peanuts		1.6	No time limitations. Do not feed treated peanut hay to livestock.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

MANEB

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Peppers	7	3.0	No time limitations.
Plums		8.0	Petal fall.
Potatoes	0.1	4.0	No time limitations.
Potatoes (seed pieces)		1.0 lb./10 gal. of H ₂ O	Dip seed pieces or whole tubers.
Prunes		8.0	Petal fall.
Pumpkins	7	2.4	No time limitations.
Raspberries		3.2	Do not apply after bloom.
Rhubarb (greenhouse)	10.0	2 lbs. 70% w.p. per 100 gals.	No time limitations.
Spinach	10	2.75	7 days. Remove excess residues by washing.
Squash (summer & winter)	7	3.0	No time limitations.
Sugar beets	45 (tops)	2.6	Foliage application. Do not apply within 10 days of harvest. Do not feed treated tops to livestock.
		1.6	Do not apply within 14 days of harvest. No restrictions on feeding tops.
Sweet corn	7 (kernel & cob)	2.4	No time limitations. Do not feed treated forage to livestock.
Tomatoes (field)	7	4.0	No time limitations.
Tomatoes (greenhouse)	7	4.0	To avoid damage, do not use on tender young plants.
Watermelons	7	4.0	No time limitations.

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MANGANOUS DIMETHYLDITHIOCARBAMATE PLUS MERCAPTOBENZOTHAZOLE

PRINCIPAL FORMULATIONS: Various proprietary wettable powder and dust formulations* with one or more of the following fungicides: dichlone, ferbam, thiram, zineb

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Apples	7.0 as man- ganous diethyl- dithio- carbamate	2.0 lbs./ 100 gals. water (spray)	No time limitations.
	0.1 mercap- tobenzo- thiazole	50 lbs./A. or 2 lbs./ tree (dust)	No time limitations.
Pears		Mixture used at 1.5 lbs./100 gals. water	Do not apply after petal fall. North- western states only.

*Proprietary name for entire range of formulations: "Niocide"

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MERCUROUS CHLORIDE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Turnips		<p>lbs. actual/A. in lime</p> <p>4.0</p> <p>4.0% (dust)</p>	<p>Apply around base of young plants. Repeat application 2 or 3 times. Early season use only.</p> <p>Dip roots of transplants in dust before transplanting.</p>

USDA Summary of Registered Agricultural Pesticide Chemical Uses

MERCURY PENTANEDIONE

PRINCIPAL FORMULATIONS: 2% soluble powder

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Cotton (seed):			
Delinted		0.04 oz./bu.	Seed treatment only. Do not use treated seed for food, feed, or oil.
Fuzzy		0.06 oz./bu.	Seed treatment only. Do not use treated seed for food, feed, or oil.
Peanuts (hulled)		0.06 oz./100 lbs.	Seed treatment only. Do not use treated seed for food, feed, or oil.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

2-METHOXY-3,6-DICHLOROBENZOIC ACID

PRINCIPAL FORMULATIONS: 49% & 57% liquid (dimethylamine salt)

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Barley (fall seeded)		lbs. actual/A. 0.25	Postemergence application after winter dormancy and before joint stage. Do not graze or feed forage or threshings to livestock.
Oats (spring seeded)		0.125	Postemergence application during 2-5 leaf stage. Do not graze or feed forage or threshings to livestock.
Oats (fall seeded)		0.25	Postemergence application after winter dormancy and before joint stage. Do not graze or feed forage or threshings to livestock.
Wheat		0.25	Apply when spring wheat is in 2-5 leaf stage or immediately after winter wheat dormancy and before jointing. Do not contaminate domestic or irrigation water. Do not graze treated areas or feed treated forage to livestock.

Proprietary name: Dicamba

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METHOXY ETHYL MERCURY ACETATE

PRINCIPAL FORMULATIONS: 4.88% and 11.4% liquids; 24.0% wettable powder

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		oz./bu.	
Barley		0.75	Seed treatment only. Do not use treated seed for food, feed, or oil.
Cotton		1.5	Seed treatment only. Do not use treated seed for food, feed, or oil.
Flax		2.0	Seed treatment only. Do not use treated seed for food, feed, or oil.
Oats		0.75	Seed treatment only. Do not use treated seed for food, feed, or oil.
Rice		0.75	Seed treatment only. Do not use treated seed for food, feed, or oil.
Rye		0.75	Seed treatment only. Do not use treated seed for food, feed, or oil.
Sorghum		0.75	Seed treatment only. Do not use treated seed for food, feed, or oil.
Wheat		0.75	Seed treatment only. Do not use treated seed for food, feed, or oil.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

6-METHYL-2,3-QUINOXALINEDITHIOL CYCLIC CARBONATE*

PRINCIPAL FORMULATIONS: 25% wettable powder

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Apples		4.5	Do not apply after first bloom. Additional application may be made to tree foliage after harvest.
		3.0	Processing fruit only. Do not apply within 35 days of harvest. Do not apply more than 3 times per season.
Apricots		3.0	Do not apply after first bloom. Additional application may be made to tree foliage after harvest.
Cherries		3.0	Do not apply after first bloom. Additional application may be made to tree foliage after harvest.
Nectarines		3.0	Do not apply after first bloom. Additional application may be made to tree foliage after harvest.
Peaches		3.0	Do not apply after first bloom. Additional application may be made to tree foliage after harvest.
Pears		4.5	Do not apply after first bloom. Additional application may be made to tree foliage after harvest.
		3.0	Processing fruit only. Do not apply within 35 days of harvest. Do not apply more than 3 times per season.
Plums		3.0	Do not apply after first bloom. Additional application may be made to tree foliage after harvest.
Prunes		3.0	Do not apply after first bloom. Additional application may be made to tree foliage after harvest.

*Proprietary name: "Morestan"
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METHYLENE CHLORIDE

PRINCIPAL FORMULATIONS: 49.4% and 50.6% liquid (used with 1,1,1-trichloroethane)

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Citrus Fruits:		lbs./1000 cu.ft.	
Grapefruit	Exempt	2.7	Degreening, with ethylene gas. Apply
Kumquats	Exempt	(2 quarts)	metered dosage over 24-hour period.
Lemons	Exempt		Exposure should not exceed 72 hours.
Limes	Exempt		Aerate by fan for 12 hours.
Oranges	Exempt		
Tangeloes	Exempt		
Tangerines	Exempt		
Strawberries	Exempt	3.5	Post-harvest fumigation. Expose to
			fumigation for 24 hours. Aerate thor-
			oughly until odor has left strawberries.
		gals./1000 bu.	
<u>Commodity</u> <u>Fumigation</u>			
Grain:			
Barley	Exempt	0.375	Aerate thoroughly after fumigation until
			all odor has left grain.
Corn	Exempt	0.6	Aerate thoroughly after fumigation until
			all odor has left grain.
Oats	Exempt	0.375	Aerate thoroughly after fumigation until
			all odor has left grain.
Popcorn	Exempt	0.6	Aerate thoroughly after fumigation until
			all odor has left grain.
Rice	Exempt	0.375	Aerate thoroughly after fumigation until
			all odor has left grain.
Rye	Exempt	0.375	Aerate thoroughly after fumigation until
			all odor has left grain.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

NABAM* (II)

PRINCIPAL FORMULATIONS: 38% and 42% liquids. Formulation not used alone, but is used in tank mix preparations by reaction of zinc sulfate to form zineb.

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Citrus Fruits:	(as zineb)		
Grapefruit	7	3 qts. + 2.5 lbs.	Two applications at rate of 10 gallons per tree at 4-6 week intervals between July 1 and August 15.
Kumquats	7	zinc sulfate/	
Lemons	7	500 gals.	
Limes	7		
Oranges	7		
Tangeloes	7		
Tangerines	7		
Cotton		2 qts./10 gals.	Apply to the furrow at planting time.
Lettuce	25	1 qt. + 3/4 lb. zinc sulfate/ 50 gals.	Plant bed treatment only. Apply weekly as a soil drench.
Celery	7	1 qt. + 3/4 lb. zinc sulfate/ 100 gals.	No time limitations. Remove residues by stripping, trimming, and washing.
Mushrooms	7	1 qt. + 3/4 lb. zinc sulfate/ 100 gals.	Apply to casing soil between "breaks".
Onions	7	1 qt. + 3/4 lb. zinc sulfate/ 100 gals.	7 days on green onions.
Peppers	7	1 qt. + 3/4 lb. zinc sulfate/ 100 gals.	Plant bed use only. Apply weekly as a soil drench.
Potatoes		1 qt. + 3/4 lb. zinc sulfate/ 100 gals.	No time limitations.
Tomatoes	7	1 qt. + 3/4 lb. zinc sulfate/ 100 gals.	No time limitations.

*Disodium ethylene bisdithiocarbamate

USDA Summary of Registered Agricultural Pesticide Chemical Uses

NABAM* (III)

PRINCIPAL FORMULATIONS: 19% liquid plus 70% ferric sulphate

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Apples		1.5 pt.-1 qt. plus 5 oz.ferric sulfate/100 gals	7 days.

*Disodium ethylene bisdithiocarbamate

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NABAM* (IV)

PRINCIPAL FORMULATIONS: Liquids plus mineral salts (zinc sulfate 11.0%; ferric sulfate 5.0%; manganese sulfate 4.0%)

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Almond	0.1 (as maneb)	2 qts. plus 1 lb. mineral salts per 100 gals.	Jacket fall.
Apples	7 (as zineb) 7 (as maneb)	2 qts. plus 1 lb. mineral salts per 100 gals.	7 days.
Apricots	7 (as zineb) 10 (as maneb)	2 qts. plus 1 lb. mineral salts per 100 gals.	Petal fall.
Cherries	7 (as zineb)	2 qts. plus 1 lb. mineral salts per 100 gals.	Petal fall.
Grapes	7 (as zineb) 7 (as maneb)	2 qts. plus 1 lb. mineral salts per 100 gals.	Do not apply after shoots are 8-12 inches long.
Nectarines	7 (as zineb) 10 (as maneb)	2 qts. plus 1 lb. mineral salts per 100 gals.	Petal fall.

*Disodium ethylene bisdithiocarbamate

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NABAM (IV)

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Peaches	7 (as zineb) 10 (as maneb)	2 qts. plus 1 lb. mineral salts per 100 gals.	Petal fall to jacket fall.
Pears	7 (as zineb)	2 qts. plus 1 lb. mineral salts per 100 gals.	Petal fall.
Plums	7 (as zineb)	2 qts. plus 1 lb. mineral salts per 100 gals.	Petal fall.
Prunes	7 (as zineb)	2 qts. plus 1 lb. mineral salts per 100 gals.	Petal fall.

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NABAM* (V)

PRINCIPAL FORMULATIONS: 19% liquid plus 75% manganese sulfate

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Beans (dry)	(as maneb) 7 (dry form)	2 qts. + 1 lb. manganese sul- fate 100 gals.	No time limitations.
Beans (succulent)	10 (succu- lent form)	2 qts. + 1 lb. manganese sul- fate 100 gals.	4 days of picking on string beans.
Cabbage	10	2 qts. + 1 lb. manganese sul- fate 100 gals.	7 days.
Carrot	7	2 qts. + 1 lb. manganese sul- fate 100 gals.	No time limitations.
Celery	10	2 qts. + 1 lb. manganese sul- fate 100 gals.	Remove excess residues by stripping, trimming and washing.
Corn, sweet	7	2 qts. + 1 lb. manganese sul- fate 100 gals.	Do not feed treated forage to livestock.
Cucurbits	7	2 qts. + 1 lb. manganese sul- fate 100 gals.	No time limitations.
Eggplant	7	2 qts. + 1 lb. manganese sul- fate 100 gals.	No time limitations.
Onions	7	2 qts. + 1 lb. manganese sul- fate 100 gals.	No time limitations.
Potatoes	0.1	2 qts. + 1 lb. manganese sul- fate 100 gals.	No time limitations.

*Disodium ethylene bisdithiocarbamate

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NABAM (V)

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Sugar beets	7	2 qts. + 1 lb. manganese sul- fate 100 gals.	30 days. Do not feed treated tops to livestock.
Tomatoes		2 qts. + 1 lb. manganese sul- fate 100 gals.	No time limitations.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

NABAM VII*

PRINCIPAL FORMULATIONS: 93% wettable powder

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
<p>NOTE: Usual dilution is 100 gal. water for each 1 to 1 1/2 lb. of 93% Nabam wettable powder. For each lb. of Nabam 93% powder mix one of the following:</p> <p>a. 3/4 lb. zinc sulfate (36% zinc)</p> <p>b. 1 1/4 zinc sulfate (22.8% zinc)</p> <p>c. 1 lb. zinc iron manganese sulfate mix</p> <p>d. 5 oz. zinc sulfate (36% zinc) and 4 oz. ferric sulfate (20% Fe)</p>			
	ppm as Zineb	lbs. 93% w.p./ acre plus mix	
Almonds		8 + c	Jacket stage.
Apple	7	8 + c	7 days.
Apricot	7	6 + c	Jacket stage.
Bean Lima Snap	7	2 + a or b	7 days.
Beets	7	2 + a or b	7 days.
Broccoli	7	2 + a or b	7 days.
Cabbage	7	2 + a or b	7 days.
Cantaloupe	7	2 + a or b	No time limitations.
Carrot	7	2 + a or b	7 days if tops are to be used for food or feed.
Cauliflower	7	2 + a or b	7 days.
Celery	7	2 + a or b	Remove residues by washing and stripping.
Cherry (sour)	7	2.5 + a or b	7 days.

*Disodium ethylene bisdithiocarbamate

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NABAM VII

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
	ppm as Zineb	lbs. 93% w.p./ acre plus mix	
Cherry	7	6 + c	California only. Jacket stage.
Citrus	7	2.5/500 gal. water plus 2 lbs. zinc sulfate (36% zinc)	7 days.
Corn	7	2 + a or b	No time limitations. Do not feed treated forage to animals.
Cotton		4 + a or b	In furrow at planting time using 10-20 gal. water per acre.
Cucumber	7	2 + a or b	No time limitations.
Grape	7	3 + a or b	7 days.
Hops	60	2 + a or b	14 days.
Kale	25	2 + a or b	7 days.
Lettuce	25	2 + a or b	5 days on head lettuce. 7 days on leaf lettuce.
Macadamia nuts		8 + d	No time limitations.
Mustard greens	25	2 + a or b	7 days.
Nectarines	7	6 + c	Jacket stage.
Onion	7	2 + a or b	7 days on green onions.
Peach	7	6 + c	Jacket stage.
Pear	7	8 + c	Petal fall.
Pecan		15 + a or b	45 days of harvest.
Pineapples		14 + d	Do not apply after fruit buds form.
Plum (prune)	7	6 + c	Jacket stage.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

NABAM VII

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
	ppm as Zineb	lbs. 93% w.p./ acre plus mix	
Potato		2 + a or b	No time limitation. Foliage application only.
Potato seed treatment		0.25 lb./30 gal. water plus 3 oz. 36% zinc sulfate	Do not use treated seed pieces for food or feed.
Spinach	25	2 + a or b	7 days.
Squash (summer)	7	2 + a or b	7 days.
Strawberry	7	2 + a or b	Apply before fruit forms and after harvest.
Swiss chard	25	2 + a or b	7 days.
Tomato	7	2 + a or b	No time limitations.
Turnip	7	2 + a or b	7 days.
Watermelon	7	2 + a or b	No time limitations.
Wheat	1	2 + a or b	Milk stage.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

NALED

PRINCIPAL FORMULATIONS: 4% dust; emulsifiable concentrate containing 8 lbs. of active ingredient per gallon

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Alfalfa		2.0	4 days.
Apricots		8.0	4 days.
Beans (dry, lima, green)		2.0	4 days.
Broccoli		2.0	4 days.
Brussels sprouts		2.0	4 days.
Cabbage		2.0	4 days.
Cauliflower		2.0	4 days.
Celery		2.0	4 days.
Chard		2.0	4 days.
Clover		2.0	4 days.
Collards		2.0	4 days.
Cotton		1.4	Do not apply within 4 days of handpicking.
Cucumbers		1.5	4 days.
Cucumbers (greenhouse)		1.0 oz./ 10,000 cu.ft.	1 day.
Eggplants		2.0	4 days.
Endive		2.0	4 days.
Filberts		10.0	10 days.
Grain sorghum		1.0	4 days.
Grapefruit		20.0	7 days.

1,2-DIBROMO-2,2-DICHLOROETHYL DIMETHYL PHOSPHATE

Proprietary name: "Dibrom"

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USDA Summary of Registered Agricultural Pesticide Chemical Uses

NALED

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Grapes		1.0 (spray)	4 days.
		2.0 (dust)	
Hops		1.0	4 days.
Kale		2.0	4 days.
Lemons		20.0	7 days.
		4.0 oz./ 100,000 cu. ft.	Postharvest fumigation. Do not apply within 7 days of shipment.
Lettuce		2.0	4 days.
Melons		4.0	7 days.
Mustard greens		2.0	4 days.
Nectarines		8.0	4 days.
Onions (bulbs only)		0.5	4 days.
Oranges		20.0	7 days.
Pastures & Rangeland		0.25	No limitations.
		1.0	Do not cut for hay to be sold commercially or shipped interstate within 4 days after application.
Peaches		8.0	4 days.
Peas		2.0	4 days.
Peppers		2.0	4 days.
Plums		8.0	4 days.
Potatoes		1.0	No time limitations.
Prunes		8.0	4 days.
Pumpkins		4.0	7 days.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

NALED

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Rice		0.75	4 days.
Soybeans		2.0	4 days.
Spinach		2.0	4 days.
Squash (summer)		1.5	4 days.
Squash (winter)		4.0	7 days.
Strawberries		1.0 (spray) 2.0 (dust)	4 days.
Sugar beets		1.0	5 days.
Tangerines		20.0	7 days.
Tomatoes		1.0	4 days.
Tomatoes (greenhouse)		1.0 oz./ 10,000 cu. ft.	1 day.
Turnips (tops & roots)		2.0	4 days.
Vetch		2.0	4 days.
Walnuts		10.0	10 days.
Animals:			
Poultry Chickens Pheasants Turkeys		0.3% in water	Apply as a light mist spray to entire bird except head. Apply at the rate of one gallon per 100 birds. Concentrate application under wings and around tail area. Do not apply to chickens under 6 weeks of age or to turkeys under 3 months of age. Repeat application as necessary.

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NOREA*

PRINCIPAL FORMULATIONS: 80% wettable powder

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Cotton		lbs. actual/A. 1.0	Preemergence application at time of or within 3 days after planting. Apply in a 12-14" band centered over the row. This treatment is equal to 3.3 lbs. actual per acre of treated bands.
		1.8	Postemergence application at time of last cultivation as a directed spray to soil. Do not plant other crops on treated soil within 5 months after application.
Sorghum		2.41	Preemergence application at time of seeding and before weeds or crop emerges.

*3 (hexahydro-4,7-methanoindan-5-yl) 1,1-dimethyl urea

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USDA Summary of Registered Agricultural Pesticide Chemical Uses

N-OCTYL BICYCLOHEPTENE DICARBOXIMIDE*

PRINCIPAL FORMULATIONS: Used as a supplemental synergist for pyrethrins

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Grain:			
Barley		1.0 lb./1000 bu.	Post-harvest application. Apply directly to grain as it is placed in storage or as a surface treatment to grain already in storage.
Corn		or 500 sq. ft.	
Oats			
Rice			
Rye			
Sorghum (Grain)			
Wheat			
Animals:			
Beef Cattle		2.0% in oil or water	Apply to outer hair as a mist spray at the rate of 2.0 oz. per animal the size of an adult cow.
Dairy Cattle			
Goats		2.0% in oil	Pressurized spray formulation. Apply to outer hair at the rate of 2.0 oz. per animal the size of an adult cow.
Sheep			
Swine		10.0% in oil	Apply by treadle sprayer at the rate of 3.6 cc per animal the size of an adult cow. Repeat twice daily.
Agricultural Premises:			
Barns		1.0% dust	Apply liberally where insects hide or congregate.
Dairy Barns			
Hog Pens		2.0% in oil or water	Apply as a space spray. Fill room with mist and keep closed for 10 minutes.
Milk Rooms			
Poultry Houses		2.0% in oil	Pressurized spray formulation. Fill room with mist and keep closed for 10 minutes.
Etc.			

*Proprietary Name: "MGK-264"

USDA Summary of Registered Agricultural Pesticide Chemical Uses

N-OCTYL SULFOXIDE OF ISOSAFROLE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Vegetables: (Cont.)			
Swiss Chard Tomatoes Turnips Watermelons		0.5% in water	Apply as a mist spray to all plant surfaces. No time limitations.
Animals:			
Beef Cattle Dairy Cattle Goats Sheep Swine		0.5% in water 1.0% in water	Dip or spray. Thorough application to animals. No time limitations. Thorough application to ventral surfaces and legs of animals. Can be applied to entire body at 2 quarts per animal the size of an adult cow.
		4.0% in oil	Apply 2 ounces per animal as a mist spray. Do not spray udder.
Agricultural Premises:			
Animal Pens Barns Dairy Barns Grain Bins Milk Rooms Poultry Houses		75 gms./1000 sq. ft. in water	Apply thoroughly to all interior surfaces as a wet spray.

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USDA Summary of Registered Agricultural Pesticide Chemical Uses

ORTHODICHLOROBENZENE

PRINCIPAL FORMULATIONS: 100% crystals; 33.34% granular

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Agricultural Premises:			
Poultry Houses Animal Sleeping Quarters		10.0% in oil	Apply liberally to all interior surfaces, especially roosts, nests, etc. in poultry houses.
Poultry breed- ing and laying houses		33.34% granules	Apply liberally on and around areas where flies breed.
Stock yards			

USDA Summary of Registered Agricultural Pesticide Chemical Uses

PARATHION

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Cotton		1.2	Do not apply within 5 days of hand picking.
Cranberries	1	0.8	15 days.
		1.0	30 days.
Cucumbers	1	0.5	15 days. Do not apply before vining.
		0.1 lb./50,000 cu. ft. of greenhouse space	15 days.
Currants	1	0.8	30 days.
Dates	1	0.8	21 days.
Dewberries		1.0	15 days.
Eggplants	1	0.8	15 days.
Endive (Escarole)	1	0.5	21 days.
		0.1 lb./50,000 cu. ft. of greenhouse space	21 days. Apply as an aerosol formula- tion.
Figs	1	2.5	30 days. Full coverage spray for control of fig scale.
Filberts		3.0	Full coverage spray. Do not apply after hulls begin to open.
Garlic	1	0.6	15 days.
Gooseberries	1	1.0	15 days.
Grapes	1	1.5	14 days.
		2.5	Apply only before fruit is the size of buckshot or after harvest.

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PARATHION

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Grass hay	1	0.8	15 days.
Grass			
Pasture	1	0.8	15 days of pasturing or harvest.
Guavas	1	2.5	30 days.
Hops	1	0.8	15 days.
Kale	1	0.25	7 days.
		0.5	10 days.
Kohlrabi	1	0.8	7 days.
Lettuce (head)	1	0.5	7 days.
		5.0	Preplanting soil application.
		0.1 lb./50,000 cu. ft. of greenhouse space	21 days.
Lettuce (bibb leaf)	1	0.25	14 days.
		0.5	21 days.
		0.1 lb./50,000 cu. ft. of greenhouse space	21 days.
Loganberries	1	1.0	15 days. Dust or spray for control of mites and aphids.
Mangoes	1	3.0	21 days.
Melons	1	0.5	7 days.
Mustard greens	1	0.25	7 days.
		0.5	10 days.

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PARATHION

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Nectarines	1	lbs. actual/A. 4.0	Areas other than California: Full coverage spray for control of scale insects. Do not apply within 14 days of harvest. Do not apply more than 5 lbs. actual parathion per acre per year.
		2.5	California: Do not apply within 21 days of harvest. Do not apply more than once after bloom. Do not apply more than 5 lbs. actual parathion per acre between January 1 and harvest.
Oats	1	1.5	15 days.
Okra	1	0.8	21 days.
Olives	1	11.0	Full coverage spray for control of olive scales. Do not apply later than Aug. 1.
Onions	1	0.8	15 days.
Pea Forage	1	0.5	15 days.
Peaches	1	4.0	Areas other than California: Full coverage spray for control of scale insects. Do not apply within 14 days of harvest. Do not apply more than 5 lbs. actual parathion per acre per year.
		2.5	California: Do not apply within 21 days of harvest. Do not apply more than once after bloom. Do not apply more than 5 lbs. actual parathion per acre between January 1 and harvest.
Peanuts	1	0.8	15 days.
Pears	1	3.6	14 days. Full coverage spray.
Peas	1	0.5	10 days.
Pecans		5.4	Full coverage spray. Do not apply within 15 days of harvest or after shucks open.

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PARATHION

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Peppers	1	0.8	15 days.
Pineapples	1	0.8	7 days.
Plums	1	4.0	14 days. Full coverage spray for control of scale insects.
Potatoes		1.0	5 days.
		4.0	Preplanting soil treatment.
Prunes	1	4.0	14 days. Full coverage spray for control of scale insects.
Pumpkins	1	0.8	10 days.
Quinces	1	3.6	14 days. Full coverage spray.
Radishes	1	0.5	15 days.
		0.1 lb./50,000 cu. ft. of greenhouse space	15 days. Apply as an aerosol formula- tion.
Raspberries	1	1.0	15 days.
Rutabagas	1	0.8	7 days.
Safflower		0.5	Do not apply after flowering.
Sorghum		1.0	12 days (of harvest or cutting for forage).
Soybeans		0.8	15 days.
Spinach	1	0.5	14 days.
Squash Summer Winter	1	0.5	15 days.
Strawberries	1	0.8	14 days.
		1.0	Postharvest treatment for control of root weevils.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

PCNB*

PRINCIPAL FORMULATIONS: 75% wettable powder; 25% liquid; 10%, 20%, and 40% dusts; 24% emulsifiable concentrate

USE <u>1/</u>	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. Actual/A.	
Alfalfa		12.0	One week after cutting or in late fall.
Bananas		0.75% paste	Apply as a paint to tips and butts of stems immediately after cutting. Do not contaminate skins.
Beans		7.5	Soil and seed treatment only (at planting time).
		5.0 (dust overall)	Foliar use. Do not feed treated vines to livestock.
		2.0 (spray directed at base of plant)	Do not apply after first bloom. Do not feed treated vines to livestock.
Broccoli		4.5 lbs./100 gals. water	Transplant solution 3/4 pint per plant.
		41.25	Row application--prior to transplanting.
		60.0	Broadcast--prior to planting.
Brussel Sprouts		4.5 lbs./100 gals. water	Transplant solution 3/4 pint per plant.
		41.25	Row application--prior to transplanting.
		60.0	Broadcast--prior to planting.
Cabbage		4.5 lbs./100 gals. water	Transplant solution 3/4 pint per plant.
		41.25	Row application--prior to transplanting.
		60.0	Broadcast--prior to planting.
Cauliflower		4.5 lbs./100 gals. water	Transplant solution 3/4 pint per plant.

*Pentachloronitrobenzene

1/ All uses listed for PCNB refer only to field grown crops unless otherwise specifically noted.

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PCNB

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Cauliflower (cont.)		lbs. actual/A.	
		41.25	Row application--prior to transplanting.
		60.0	Broadcast--prior to planting.
Clover		12.0	One week after last cutting or in late fall.
Cotton		5.0	Soil and seed treatment only (at planting time).
Cotton (seed)		4.0 oz./100 lbs. seed	Seed treatment. Do not use treated seed for food or feed.
Garlic		10.2 lbs. per 1000 lbs.	Seed clove treatment (dust). Do not use treated seed for food or feed.
		22.5	Soil and seed treatment only (at planting time).
Lettuce (head)		22.5	Band application when plants are 2-3 inches high.
		4.0	Band application when plants are 2-3 inches high. Repeat application once ten days later (25-55 days preharvest).
Peanuts		18.75	Surface band application at pegging time.
		20.0	Preplanting soil application only.
		18.0	Divided into three successive applications of six pounds per acre each during cultivations. Band treatment (12 inch band centered on row). Do not feed treated peanut hay to livestock.
Peppers		7.5	Trench treatment at planting time.

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PHENYL MERCURI LACTATE

PRINCIPAL FORMULATIONS: 5.3% solution

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Apples		1 pt./100 gals.	Early season application up to petal fall.

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PHENYL MERCURI TRIETHANOL AMMONIUM LACTATE

PRINCIPAL FORMULATIONS: 7.5% liquid

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. Actual/A.	
Apples	0	0.2	Through petal fall.
Apricots	0	0.045	Pink to petal fall.
Cherries	0	0.045	Up to petal fall.
Peaches	0	0.045	Up to petal fall.
Pears	0	0.2	Through petal fall.
Potatoes	0	1 fl.oz./3 gals. water	Dip seed potatoes one minute.
Strawberries	0	0.045	Dormant application.
Sweet Potatoes	0	1 teaspoon/6 gals. water	Prebedding root and sprout dip treatment.
Walnuts	0	19.0	3-4 months before harvest.

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PHENYL MERCURY DIMETHYLDITHIOCARBAMATE

PRINCIPAL FORMULATIONS: 10% powder

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Apples		lbs. actual/A. 0.56	Delayed dormant application through petal fall. Do not apply after petal fall.

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PHENYL MERCURY MONOETHANOL AMMONIUM ACETATE

PRINCIPAL FORMULATIONS: 11.5% solution

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Apples	0	0.5 pint of solution/100 gals. water	Do not apply after petal fall.
Pears	0	0.5 pint of solution/100 gals. water	Do not apply after petal fall.
Strawberries	0	0.5 pint of solution/100 gals. water	Dormant application in spring, or post- harvest. Do not apply more than 250 gallons per acre.

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PHENYL MERCURY NITRATE

PRINCIPAL FORMULATIONS: 0.3% paint or paste

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Almonds		0.3% paint or paste	Tree wound dressing. Postharvest and dormant applications only.
Prunes		0.3% paint or paste	Tree wound dressing. Postharvest and dormant applications only.

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PHOSPHAMIDON*

PRINCIPAL FORMULATIONS: Emulsion concentrate, four pounds per gallon

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Alfalfa		0.5 (spray) 1.0 (dust)	10 days.
Apples		6.0	60 days.
Beans		0.5	14 days. Do not feed treated vines to livestock.
Cabbage		0.75	7 days.
Cantaloupes		0.5	3 days.
Cherries (red tart)		4.0	Apply during delayed dormancy, post-harvest or nonbearing years only.
Cotton		0.5	Do not apply within two weeks of harvest.
Cucumbers		0.5	14 days.
Eggplant		0.5	3 days.
Grapefruit		2.5	Do not apply within four months of harvest.
Lemons		2.5	Do not apply within four months of harvest.
Oranges		2.5	Do not apply within four months of harvest.
Peas		0.5	16 days.
Peppers		2.0	14 days.
Potatoes		1.0	7 days.
Rice		0.5	21 days. Do not feed treated straw to dairy animals or animals being finished for slaughter.
Sugar beets		1.0	30 days.
Tomatoes		0.5	10 days.

*2-chloro-2-diethylcarbamoyl-1-methylvinyl dimethyl phosphate

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PHOSPHAMIDON

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Walnuts		1.0	21 days.
Watercress		1.0	3 days.
Wheat		0.5	30 days.

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POLYETHYLENE POLYMER CONTAINING 3 PARTS OF [ETHYLENEBIS [DITHIOCARBAMATO]]

ZINC TO 1 PART OF [[DITHIOBIS[(THIOCARBONYL) IMINOETHYLENE]]

BIS [DITHIOCARBAMATO]] ZINC

PRINCIPAL FORMULATIONS: 80% wettable powder; 10% dust

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Apples		8.0	Apply to petal fall. Do not apply within 90 days of harvest.
		6.0	Cover spray. Do not apply within 90 days of harvest.
Corn (sweet) for fresh vegetable use		3.2	Florida only. Do not apply within 1 day of picking. Do not feed forage to live-stock.
Cotton		1.0 actual/100 lbs. seed	Planter box seed treatment.
Peanuts		1.6	Do not feed treated forage to dairy animals or animals being finished for slaughter.
Pecans		16.0	Do not apply after shuck-split.
Potatoes		1.6	No time limitations.
Tomatoes		1.9	Do not apply within 30 days of harvest.

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POTASSIUM AMMONIUM ETHYLENE BISDITHIOCARBAMATE

PRINCIPAL FORMULATIONS: 25% solution; formulation is used in tank mix preparations by reaction of zinc sulphate to form zineb and manganese sulphate to form maneb. Rate of tank mixture equals 3 qts. of 25% solution per 100 gals. of water plus 0.75 lbs. of 36% metallic zinc sulphate & 0.75 lbs. of metallic manganese sulphate. Apply at the rate of 150 gals. of mixture/A.

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Beans (succulent)	10 maneb 7 zineb	qts./100 gals. water 3.0	7 days.
Broccoli	10 maneb 7 zineb	3.0	7 days.
Brussels sprouts	10 maneb 7 zineb	3.0	7 days.
Cabbage	10 maneb 7 zineb	3.0	7 days.
Cantaloupes	7 maneb 7 zineb	3.0	No time limitations.
Cauliflower	10 maneb 7 zineb	3.0	7 days.
Celery	10 maneb 7 zineb	3.0	No time limitations. Remove residues by washing, stripping, and trimming.
Corn (sweet)	7 maneb (kernel & cob) 7 zineb	3.0	No time limitations. Do not feed treated forage to livestock.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

POTASSIUM CYANATE*

PRINCIPAL FORMULATIONS: 80%-92% wettable powders (crystals);
50%-83% pellets

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Alfalfa		18.4	Apply when crop is dormant in winter.
Asparagus		18.4	Apply as directed spray to base of plants in fern stage.
Corn		18.4	Preemergence application only.
Garlic		38.6	Preemergence application only.
		22.0	Postemergence application at crook neck stage. Repeat as a directed spray at 3 true leaf stage. Do not apply in flag stage. Do not apply within 30 days of harvest.
Grapes		18.4	Apply not later than petal fall as directed spray at base of crop.
Onions		38.6	Preemergence application only.
		22.0	Postemergence application at crook neck stage. Repeat as a directed spray at 3 true leaf stage. Do not apply in flag stage. Do not apply within 30 days of harvest.
Pastures		12.8	Apply to seedling and large weed plants in sufficient water for uniform coverage.
Peas		6.8	Postemergence application during seedling stage.
Small Fruits:			
Blackberries		18.4	Apply as directed spray in early spring while crops are dormant.
Dewberries			
Raspberries			
Strawberries		18.4	Apply when plants are dormant in spring.

*KOCN

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POTASSIUM CYANATE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Tomatoes (Direct Seeded)		lbs. actual/A. 14.7	Preemergence application 2 days before tomatoes emerge. May be applied with TCA.
Tree fruits		12.8	Apply to seedling and large weed plants in sufficient water for uniform coverage.

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POTASSIUM OLEATE

PRINCIPAL FORMULATIONS: With other ingredients as animal remedies

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Animals: Beef Cattle Dairy Cattle Goats Sheep Swine		10%	Formulated with other ingredients and applied locally as a screw-worm or ear tick remedy.

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S-PROPYL DIPROPYL THIOCARBAMATE

PRINCIPAL FORMULATIONS: 75.9% emulsifiable concentrate containing 6 lbs. actual per gallon

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Peanuts		lbs. actual/A. 3.0	Preplanting soil incorporation. Plant seed as soon as possible after treatment. or Preemergence soil incorporation.
Soybeans		3.0	Preplanting soil incorporation. Plant seed as soon as possible after treatment. or Preemergence soil incorporation. or Postemergence soil incorporation when crop is 1 to 2 inches tall.
Tomatoes		4.0	Preplanting soil application. Incorporate 2-4 inches deep and direct seed immediately. or Postemergence application as a directed spray to soil. Incorporate 2-4 inches deep immediately. or Apply at time of last cultivation directed to soil. Incorporate 2-4 inches deep immediately. Do not apply within 8 days of harvest.

*Proprietary name: Vernam

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S-PROPYL BUTYLETHYLTHIOCARBAMATE

PRINCIPAL FORMULATIONS: 76% emulsifiable concentrate; 10% granular

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Sugar beets		lbs. actual/A. 6.0	Preplant soil application, incorporate immediately 2-4 inches deep, and seed immediately.
Tomatoes		4.0	Preplant soil application, incorporate immediately 2-4 inches deep. Seed or set transplants immediately. or Postemergence application directed to soil, incorporate immediately 2-4 inches deep. Do not apply after fruit begins to form.

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PROPYLENE DICHLORIDE

PRINCIPAL FORMULATIONS: Emulsifiable concentrates

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Apricots		1 oz. per tree in diluted emulsion form	Peach tree borer control. Apply diluted solution around the tree trunk and cover with soil. Do not apply directly to tree trunk. Smaller amounts should be applied to younger trees because of possible phytotoxicity.
Barley		9.0 gal./1000 bu.	Seed treatment only.
Corn		9.0 gal./1000 bu.	Seed treatment only.
Nectarines		1 oz. per tree in diluted emulsion form	Peach tree borer control. Apply diluted solution around the tree trunk and cover with soil. Do not apply directly to tree trunk. Smaller amounts should be applied to younger trees because of possible phytotoxicity.
Oats		9.0 gal./1000 bu.	Seed treatment only.
Peaches		1 oz. per tree in diluted emulsion form	Peach tree borer control. Apply diluted solution around the tree trunk and cover with soil. Do not apply directly to tree trunk. Smaller amounts should be applied to younger trees because of possible phytotoxicity.
		0.2 lbs./tree in diluted emulsion form	Peach tree borer control. Apply around base of tree and cover with soil. Use on mature trees only.
Rice		9.0 gal./1000 bu.	Seed treatment only.
Rye		9.0 gal./1000 bu.	Seed treatment only.
Sorghum (milo)		9.0 gal./1000 bu.	Seed treatment only.
Wheat		9.0 gal./1000 bu.	Seed treatment only.

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RONNEL*

PRINCIPAL FORMULATIONS: Bolus containing 15 grams of active ingredients. 25% wettable powder; 12% and 24% emulsifiable concentrate; 5% screw worm smears. 5% granular

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Bananas	0.5	0.25 gram actual/stalk	Enclose stalk of bananas in special bag. After placing open-end of bag over the banana stem, fold the bottom edge of the bag to form a pocket. Tie the bottom of the bag securely. To avoid fruit injury do not allow the Korlan 25W to contact the bananas.
Beef Cattle Dairy Cattle (non-lactating)	0 in meat	0.26%** (mineral feed mixture)	Mix with grain or protein supplement, so that animals will receive 0.3 lbs. of the 0.26% mixture per 100 lbs. of body weight daily for 14 consecutive days. Do not feed to cows producing milk for human consumption. Do not feed to any cattle within 28 days of slaughter. Do not feed to heifers within 28 days of freshening that will produce milk for human consumption. Use as only source of ronnel medication.
		0.6%** (feed mixture)	Mix with feed so that animals will receive 0.33 lbs. of the 0.6% feed mixture per 100 lbs. of body weight daily for 7 consecutive days. Apply after heel fly activity has ceased and before grubs start to cut in the back. Do not feed to sick or stressed animals. Do not feed to mature dairy animals or to meat animals within 60 days of slaughter. Do not feed to mature dairy heifers within 60 days of freshening. Do not feed to animals other than cattle.
		15.0 gms./** 300 lbs. of body weight	Apply orally in bolus formulations. Do not apply within 50 days of slaughter. Do not apply to lactating dairy animals or to dry dairy animals within 60 days of freshening.

*O,O-dimethyl O-2,4,5-trichlorophenyl phosphorothioate; proprietary name: "Trolene" and "Korlan."

** Purified grade only.

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RONNEL

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Beef Cattle Dairy Cattle (non-lactating) (Cont.)	0 in meat	5.5% in mineral supplement, block, or granular	Free choice feeding. 0.25 lbs. of product per 100 lbs. body weight per head per month. Feed for 75 days or more continuously. Do not feed to dairy cows, or dairy heifers within 21 days of freshening. Do not feed to any cattle within 21 days of slaughter. Use as only source of ronnel medication.
		1.5% (in oil)	Apply by back-rubbers. Do not apply within 6 weeks of slaughter. Do not apply to lactating dairy animals or to dry dairy animals within 21 days of freshening.
		0.75% (in water)	Dip or spray. Thoroughly wet animals. Do not apply within 8 weeks of slaughter. Do not apply more frequently than once every 2 weeks. Do not apply to lactating dairy animals or to dry dairy animals within 21 days of freshening.
		5.0% (screw-worm treatment)	Apply locally to wounds, cuts, and scratches. Do not apply within 21 days of slaughter. Do not apply to lactating dairy animals, or to dry dairy animals within 21 days of freshening.
		5.0% (dust)	Apply locally to wounds, cuts, and scratches. Do not apply within 21 days of slaughter. Do not apply to lactating dairy animals or to dry dairy animals within 21 days of freshening.
Goats Sheep		0.5% (in water)	Dip or spray. Thoroughly wet animals. Do not apply within 12 weeks of slaughter. Do not apply more frequently than once every 2 weeks. Do not apply to lactating dairy animals, or to dry dairy animals within 21 days of freshening.
		5.0% (screw-worm treatment)	Apply locally to wounds, cuts, and scratches. Do not apply within 21 days of slaughter. Do not apply to lactating dairy animals or to dry dairy animals within 21 days of freshening.

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ROTEENONE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. Actual/A.	
Vegetables:			
Blackeyed Peas	Exempt	0.5	1 day.
Broccoli	Exempt		
Brussels			
Sprouts	Exempt		
Cabbage	Exempt		
Cantaloupes	Exempt		
Carrots	Exempt		
Cauliflower	Exempt		
Celery	Exempt		
Collards	Exempt		
Cowpeas	Exempt		
Cucumbers	Exempt		
Endive	Exempt		
Garlic	Exempt		
Horseradish	Exempt		
Kale	Exempt		
Kohlrabi	Exempt		
Leeks	Exempt		
Lettuce	Exempt		
Melons	Exempt		
Okra	Exempt		
Onions	Exempt		
Parsnips	Exempt		
Peppers	Exempt		
Pimentoes	Exempt		
Pumpkins	Exempt		
Rutabagas	Exempt		
Salsify	Exempt		
Shallots	Exempt		
Spinach	Exempt		
Squash			
(Summer)	Exempt		
Squash			
(Winter)	Exempt		
Sweet Potatoe	Exempt		
Swiss Chard	Exempt		
Turnips	Exempt		
Watermelons	Exempt		

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ROTENONE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Animals:			
Cattle (all)		0.12% (in water)	Dip or spray. Thoroughly drench animal. Apply spray to back of animal at 300 psi for control of cattle grubs.
		0.5% (in water)	Apply to back and shoulders of animal as a wash. Thoroughly scrub back with a stiff brush as application is made.
		0.25% (in oil)	Apply by backrubbers.
		2.5% (dust)	Apply up to 6 ounces on back and shoulders to each animal and work into hair with hands or a brush.
		2.0% (dust)	Thorough application to animals.
		0.1% (in oil)	Apply once or twice daily at the rate of 1 ounce per animal.
Goats Sheep		0.03% (in water)	Dip or spray. Thoroughly drench animals.
		2.0% (dust)	Thorough application to animals. Work dust into fleece to skin.
Poultry		2.0% (dust)	Thorough application to birds. Work dust into feathers.
Swine		0.25% (in oil)	Apply by rubbing devices
		2.0% (dust)	Thorough application to animals.
		0.03% (in water)	Dip or spray. Thoroughly drench animal.

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SILICA AEROGEL

PRINCIPAL FORMULATIONS: 100%; also used with various toxicants as animal remedies

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Agricultural Premises: Barns Feed Rooms Grain Bins Etc. (exclude dairy barns)		1.25 lbs./ 1000 sq. ft.	Formulated with other ingredients and applied liberally to infested area. Do not contaminate feed or drinking water.
Animals: Beef Cattle Dairy Cattle Goats Sheep Swine		10.0%	Formulated with other ingredients and applied locally as screw-worm or ear tick remedies.

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SILVEX*

PRINCIPAL FORMULATIONS: 59-65 and 67.9% emulsifiable concentrates including butoxy-ethanol, iso-octyl and propylene glycol butyl ether esters; 10.4% amine salt solution; 10.6% triethanolamine salt

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Apples		lbs. actual/A. 20 ppm	Preharvest drop. Apply 4 days before harvest drop normally begins. No pre-harvest limitations.
Pastures & Ranges		61 grams/A. 4.0	Concentrated spray application. Woody plants and brush. Apply in late spring thru season until 3 weeks before frost. Do not use on freshly seeded pastures or rangelands.
Pears		0.75 7.5 ppm	Mesquite control. Make an application in late spring when plants have leaves fully expanded. Postharvest application to trees immediately after harvest.
Prunes		20 ppm	Do not apply within 60 days of harvest.
Sugarcane			
Florida		1.5	Postemergence broadcast application. Make second application before cane is 3 1/2 feet tall.
Hawaii		5.0	Preemergence application immediately after planting or ratooning and before cane emerges.
		5.0 (with 3.7 lbs. dalapon acid equiv.)	Postemergence application as a directed spray to weeds in interline space. Do not spray cane. Do not apply more than twice to any one crop.
Louisiana		3.0	Preemergence application immediately after shaving and off-barring. or Postemergence application before cane is 3 1/2 feet tall up to 5 months before harvest.

*2(2,4,5-trichlorophenoxy) propionic acid; 2,4,5-TP

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SILVEX

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Rice		lbs. actual/A. 1.5	Treat 4-8 weeks after emergence of rice. If flooded, treat 7-9 weeks after seeding.
Lakes & Ponds		lbs. actual/A. ft. of water	
Submerged Weeds		5	Apply in late spring or early summer as spray over surface of lake or pond.
Emerged Weeds		8	Apply as above or on emerged foliage. Avoid use in waters intended for irrigation, crop spraying or domestic and animal water supplies. Some fish kill may occur.

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SIMAZINE*

PRINCIPAL FORMULATIONS: 50% and 80% wettable powders; 4%, 8%, and 10% granular formulations; 25% paste

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Almonds		3.2	Broadcast single soil application in late fall or early spring. Do not apply to foliage or while nuts are on ground.
Apples		4.0	Apply in spring before weeds emerge. Apply only to trees which have been established 1 year or more.
Artichokes		4.0	Directed spray after last fall tillage around established crop plants.
Asparagus (established)		4.0	Apply in spring after discing and prior to weed and spear emergence. Repeat application at end of harvest season after weedy growth has been removed.
Avocados		4.0	Broadcast single soil application in late fall to mid-winter. Do not apply to foliage or fruit.
Blackberries		4.0	Broadcast soil application in spring before weeds emerge and before buds break; or broadcast soil application in fall. Do not apply when fruit is present.
Blueberries		4.0	Broadcast soil application in spring before weeds emerge and before buds break; or broadcast soil application in fall. Do not apply when fruit is present.
Boysenberries		4.0	Broadcast soil application in spring before weeds emerge and before buds break; or broadcast soil application in fall. Do not apply when fruit is present.
Cherries (sour)		4.0	Apply in spring before weeds emerge. Apply only to trees which have been established 1 year or more.

*2-chloro-4,6-bis (ethylemino)-s-triazine

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SODIUM ARSENATE*

PRINCIPAL FORMULATIONS: Wettable powders and baits

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
All Crops		6.0% (bait formula- tions)	Apply bait in small containers near ant colonies, etc. Do not contaminate edible parts.
Animals:			
Goats		0.15% (in water)	Dip or spray. Formulated with other ingredients. Thorough application to animals.
Sheep			

*See also "Sodium Arsenite" and "Arsenic Trioxide"

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SODIUM CHLORATE

PRINCIPAL FORMULATIONS: 40% wettable powder; 12%, 20%, and 23.5% dusts;
4.7%, 18.2%, 18.5%, 19%, 22%, and 28% liquids;
30% granular (with metaborate)

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Beans (dry)		4.1	7 days. Preharvest defoliation.
Cotton		5.0	Preharvest defoliation and desiccation. Do not apply within 7 days of harvest. Do not graze treated areas or feed gin waste to livestock.
		261	Spot treatment for Johnson grass. Wet foliage and soil. Do not graze treated areas or feed gin waste to livestock.
Potatoes		16.0	Do not apply within 2 weeks of harvest.
Rice		6.0	Desiccant - Apply when rice is fully mature with panicles turned down and yellowish, 7-10 days before combining.
Sorghum		6.0	Desiccant - Apply when sorghum is fully mature 7-10 days before harvest.
Tomato		4.0	Plant desiccant. Apply after first picking. Repeat application after second picking if necessary.

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SODIUM CRESYLATE*

PRINCIPAL FORMULATIONS: 11.0% liquid

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
<p>Animals:</p> <p>Beef Cattle Dairy Cattle Goats Sheep</p>		<p>0.1% (in water)</p>	<p>Formulated with other ingredients for use as a dip. Thoroughly drench animals. No time limitations.</p>

*Also see "Sodium Arsenite"

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SODIUM o-PHENYLPHENATE

PRINCIPAL FORMULATIONS: 97.0% wettable powder
 2.0%, 23.0%, 30.0%, 34.0%, and 40.0% solutions
 1.0% wax emulsion
 0.7% wax emulsion

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Apples	25	0.45% solution	Postharvest treatment. Dip fruit for 45 seconds and rinse with fresh water.
Bananas		2.0%	Postharvest treatment. Spread evenly over exposed cut stem area or crown of head area. Do not contaminate skin or fruit.
Cantaloupes	125 (not more than 10 in edible portion)	1.5% solution	Postharvest dip or spray. Allow to drain; do not rinse.
Carrots	20	0.1% (in water)	Postharvest dip, flood or spray.
		0.5%	Solvent system wax applicator.
Cherries	5	1.0% water solution with wetting agent	Postharvest dip or spray. Rinse briefly with fresh water.
Citrus Fruits:			
Citron	10	3.0% in water	Postharvest treatment. Dip 2 minutes;
Grapefruit	10	plus caustic	rinse with fresh water.
Kumquats	10	and hexamine	
Lemons	10		
Limes	10	1 gal. 1% wax	Postharvest application by wax foamer or
Oranges	10	emulsion per	suitable spray unit.
Tangelos	10	10,000 lbs. fruit	
		1 gal. 0.5% anhydrous wax emulsion per 5000 lbs. of fruit	Postharvest applications as wax coating.

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Replaces pages issued 2-10-65

USDA Summary of Registered Agricultural Pesticide Chemical Uses

SODIUM o-PHENYLPHENATE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Cucumbers	10	1.0% (in water)	Postharvest dip, flood or spray. Flush with water for at least 30 seconds after treatment.
		2.0%	Commercial wax applicator.
Nectarines	5	1.0% (in water)	Postharvest dip, flood or spray. Flush briefly with fresh water after treatment.
Peaches	20	0.05% solution	Postharvest dip for 15-18 minutes at 33-35°F. Allow to drain; do not rinse.
		0.6% water solution	Postharvest dip for 20-30 seconds. Rinse fruit after treatment. If machine is stopped during operation, immediately rinse fruit manually.
Pears	25	0.45% solution	Postharvest treatment. Dip fruit for 45 seconds and rinse with fresh water.
Peppers	10	1.0% (in water)	Postharvest dip, flood or spray. Flush with water for at least 30 seconds after treatment.
		2.0%	Commercial wax applicator.
Pineapple	10	1.25% (in water)	Postharvest dip. Remove immediately. Do not rinse.
		1 gal. 1% wax emulsion per 10,000 lbs. fruit	Postharvest application by wax foamer or suitable spray unit.
Plums	20	0.1% (in water)	Postharvest dip, flood or spray. Flush briefly with water after treatment.
		2.0%	Solvent system commercial wax applicator.
Sweet potatoes	15	0.5% solution (tetrahydrate) or 0.37% solution (anhydrous)	Postharvest flooding. Use 1 gal. of solution per 2000 lbs. of sweet potatoes.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

SODIUM o-PHENYLPHENATE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Sweet potatoes (cont.)	15	0.7% (anhydrous) wax emulsion	Postharvest application at the rate of 1 gallon per 4,000 lbs. of sweet potatoes.
Tomatoes	10	1.0% (in water)	Postharvest dip, flood, or spray. Flush with fresh water for at least 30 seconds.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

STREPTOMYCIN

PRINCIPAL FORMULATIONS: 15% and 20% powders; 0.1%, 2.0% & 8.5% dusts; 37% and 62.5% formulations of sulfates and nitrates

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Apples		200 ppm	Do not apply after fruit is visible.
		60 ppm (spray)	120 days. For use in West Coast Area only.
		1500 ppm (dust)	
Beans		400 ppm	Apply only on seed crop or before pods appear on table beans. Do not feed treated vines to livestock.
Celery		200 ppm	Plant beds only.
Cucumbers		400 ppm	Do not apply after edible portions begin to form.
Hops		1000 ppm	Treat hop crown when shoots first appear. Repeat first soak spray after crown pruning (shoots 4-12 inches long). Do not apply after first vine training.
Pears		200 ppm	Do not apply after fruit is visible.
		60 ppm (spray)	90 days. For use in West Coast Area only.
		1500 ppm (dust)	
Peppers		2000 ppm (dust)	Plant beds only.
		200 ppm	Do not apply after edible portions begin to form.
Potatoes		100 ppm	Soak cut seed pieces 30 minutes.
Sesame		250 ppm	Seed treatment only. Do not use treated seed for food or feed. Do not feed treated plants to livestock.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

STREPTOMYCIN

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Tomatoes		2000 ppm (dust)	Plant beds only.
		200 ppm	Do not apply after edible portions begin to form.
Walnuts		200 ppm	Do not apply after fruit is visible.
		50 ppm (spray)	120 days.
		1000 ppm (dust)	

USDA Summary of Registered Agricultural Pesticide Chemical Use*

TDE (DDD)

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Cauliflower	7	5.0	Do not apply after edible parts start to form.
Cherries	7	8.0	30 days.
Citrus:			
Grapefruit	7	30.0	14 days.
Kumquats	7		
Lemons	7		
Limes	7		
Oranges	7		
Tangeloes	7		
Tangerines	7		
Clover		5.0	Do not feed treated forage to dairy animals or animals being finished for slaughter.
		1.0	Granular. Apply to irrigated fields as a mosquito larvacide.
Corn	7	10.0	Do not feed treated forage to dairy animals or animals being finished for slaughter.
Corn		2.0 oz./bu.	Seed treatment only. Do not use treated seed for food, feed, or oil.
Cotton		1.5	Do not graze or feed gin waste to dairy animals or animals being finished for slaughter, when fields have been treated late in the season.
Cotton		2.0 oz./bu.	Seed treatment only. Do not use treated seed for food, feed, or oil.
Cowpeas		2.0 oz./bu.	Seed treatment only. Do not use treated seed for food, feed, or oil.
Cucumbers	7	3.0	Do not apply immediately before harvest.
Currants		4.0	Do not apply after fruit starts to form.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

TDE (DDD)

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Dewberries	7	4.0	14 days.
Eggplants	7	4.0	Do not apply immediately before harvest.
Filberts		5.0	Do not apply after husks open.
Gooseberries		4.0	Do not apply after fruit starts to form.
Grapes	7	5.0	40 days. Do not use additional spreaders or stickers after buckshot stage.
Kohlrabi	7	3.0	Do not apply after edible parts start to form.
Lettuce	7	5.0	Do not apply after heads start to form on head lettuce. Do not apply after seedling stage on leaf lettuce.
Loganberries	7	4.0	14 days.
Melons	7	5.0	No time limitations.
Nectarines	7	8.0	30 days.
Oats		2.0 oz./bu.	Seed treatment only. Do not use treated seed for food, feed, or oil.
Onions		3.0	Do not apply to green or spring onions.
Peaches	7	8.0	30 days.
Peanuts		2.0	Two applications per season. Do not apply within 21 days of harvest. Do not feed treated forage or plant parts to poultry, dairy animals or animals being finished for slaughter. Do not graze treated areas or cut treated foliage for silage.
Peanuts (seed)		2.0 oz./bu.	Seed treatment only. Do not use treated seed for food, feed, or oil.
Pears	7	12.0	30 days.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

TDE (DDD)

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Peas		2.0 oz./bu.	Seed treatment only. Do not use treated seed for food, feed, or oil.
Peppers	7	4.0	Do not apply immediately prior to harvest.
Plums	7	8.0	30 days.
Potatoes		5.0	No time limitations.
Prunes	7	8.0	30 days.
Pumpkins	7	3.0	Do not apply immediately prior to harvest.
Quinces	7	12.0	30 days.
Raspberries	7	3.0	14 days.
Rice		1.0	Granular formulation. Apply to fields as a mosquito larvacide.
Rice (seed)		2.0 oz./bu.	Seed treatment only. Do not use treated seed for food, feed, or oil.
Rutabagas	7	3.0	No time limitations.
Rye		2.0 oz./bu.	Seed treatment only. Do not use treated seed for food, feed, or oil.
Sorghum		2.0 oz./bu.	Seed treatment only. Do not use treated seed for food, feed, or oil.
Soybeans		2.0	Do not apply within 56 days of harvest. Do not apply more than once per season. Do not feed forage or plant parts to poultry, dairy animals, or animals being finished for slaughter. Do not graze treated areas or cut treated crop for silage.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

TDE (DDD)

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Soybeans (cont.)		1.0	Do not apply within 28 days of harvest. Do not feed forage or plant parts to poultry, dairy animals, or animals being finished for slaughter. Do not graze treated areas or cut treated crop for silage.
Soybeans (seed)		2.0 oz./bu.	Seed treatment only. Do not use treated seed for food, feed, or oil.
Spinach	7	2.0	Do not apply after seedling stage.
Squash	7	3.0	Do not apply immediately prior to harvest.
Strawberries	7	3.0	5 days.
Tomatoes	7	6.0	Do not apply immediately prior to harvest.
Turnips	7	3.0	Do not apply after seedling stage if tops are to be used for food or feed.
Wheat		2.0 oz./bu.	Seed treatment only. Do not use treated seed for food, feed, or oil.
Animals:			
Goats Sheep		1.0% in oil	Apply as a mist spray at the rate of 1.0-1.5 oz. per animal. Do not apply to dairy animals.
Swine		1.0% in oil	Apply only as a mist spray to the animal.
Agricultural Premises:			
Barns Milk rooms Animal pens (excluding dairy barns & poultry houses)		5.0% in oil or water	Apply thoroughly as a residual type spray. Do not contaminated feed or water. Do not use in dairy barns. Exclude animals during treatment. Do not contaminate milk or milk handling equipment.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

TDE (DDD)

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Agricultural Premises: (cont.)		lbs. actual/A. 1.0% in oil or water	Apply as a space or mist spray. Do not contaminate feed or water. Do not use in dairy barns. Exclude all animals during treatment. Do not contaminate milk or milk handling equipment.
General:		3.6% (paint)	Formulated with interior paint. Apply to all interior surfaces. Do not use in dairy barns or poultry houses. Exclude all animals during treatment.
Mosquito control Swampy pastures Uncultivated land Other		1.5	Granular formulation. Apply by aircraft as a mosquito larvacide.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

TEPP*

PRINCIPAL FORMULATIONS: 20% to 40% emulsifiable concentrates; 2% to 5% dusts

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Bush & Vine Fruits:			
Blackberries	0	2.0	3 days.
Blueberries	0	(as spray)	
Boysenberries	0	2.5	
Cranberries	0	(as dust)	
Currants	0		
Dewberries	0		
Gooseberries	0		
Grapes	0		
Huckleberries	0		
Loganberries	0		
Raspberries	0		
Strawberries	0		
Youngberries	0		
Citrus:			
Grapefruit	0	5.0	3 days
Kumquats	0		
Lemons	0		
Limes	0		
Oranges	0		
Tangeloes	0		
Tangerines	0		
Deciduous Fruits:			
Apples	0	5.0	3 days.
Apricots	0		
Cherries	0		
Dates	0		
Figs	0		
Nectarines	0		
Olives	0		
Peaches	0		
Pears	0		
Persimmons	0		
Plums	0		

*Tetraethyl pyrophosphate

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TEPP

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Deciduous Fruits: (Cont.)			
Pomegranate	0	5.0	3 days.
Prunes	0		
Quinces	0		
Field & Forage Crops:			
Alfalfa	0	2.0	3 days.
Barley	0		
Birdsfoot	0		
Trefoil			
Buckwheat	0		
Clover	0		
Corn	0		
Cotton	0		
Flax	0		
Grasses	0		
Hops	0		
Lespedeza	0		
Millet	0		
Milo	0		
Oats	0		
Pasture Grass	0		
Peanuts	0		
Popcorn	0		
Rice	0		
Rye	0		
Safflower	0		
Sorghum	0		
Soybeans	0		
Sugar Beets	0		
Sugarcane	0		
Vetch	0		
Wheat	0		

USDA Summary of Registered Agricultural Pesticide Chemical Uses

TEPP

PRINCIPAL FORMULATIONS:

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Greenhouse Vegetables:			
Cucumbers	0	0.05 lbs./	3 days. Greenhouse aerosol formulations.
Endive	0	50,000 cu. ft.	
Lettuce	0	of space	
Radishes	0		
Tomatoes	0		
Watercress	0		
Nuts:			
Almonds	0	3.5	2 days.
Cashews	0		
Chestnuts	0		
Filberts	0		
Hazelnuts	0		
Hickory Nuts	0		
Pecans	0		
Walnuts	0		
Dill	0	0.5	3 days.
Mint	0	0.5	3 days.
Vegetables:			
Asparagus	0	2.0	3 days. Do not apply to sensitive crops.
Beans	0		
Beets	0		
Blackeyed Peas	0		
Broccoli	0		
Brussels	0		
Sprouts			
Cabbage	0		
Cantaloupes	0		
Carrots	0		
Cauliflower	0		
Celery	0		
Collards	0		
Corn	0		
Cowpeas	0		
Cucumbers	0		
Eggplants	0		

USDA Summary of Registered Agricultural Pesticide Chemical Uses

TEPP

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Vegetables: (Cont.)		lbs. actual/A.	
Endive	0	2.0	3 days. Do not apply to sensitive crops.
Garlic	0		
Horseradish	0		
Kale	0		
Kohlrabi	0		

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Follows page 764

USDA Summary of Registered Agricultural Pesticide Chemical Uses

4-TERT-BUTYL-2-CHLOROPHENYL METHYLPHOSPHOROAMIDATE*

PRINCIPAL FORMULATIONS: 25% emulsifiable concentrate; 25% wettable powder;
9.4% solution; 21% drench

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Cattle		0.5% (in water)	Do not repeat application within 28 days. Apply approximately one gallon per animal weighing 300 lbs. or more, proportionately less for smaller animals. Do not apply to lactating dairy animals or to dry dairy animals within 28 days of freshening. Do not apply to meat animals within 28 days of slaughter.
		8.3%	Do not repeat application within 28 days. Apply by pouring evenly on the animals back at 1.0 fluid ounces per 100 lbs. of body weight. Do not apply to lactating dairy animals or to dry dairy animals within 28 days of freshening. Do not apply to meat animals within 28 days of slaughter.
		9.4% solution	Apply by pouring evenly on animals back at the rate of 1 fluid ounce per 100 lbs. of body weight. Do not repeat application within 28 days. Do not apply to lactating dairy animals or to dry dairy animals within 28 days of freshening. Do not apply to meat animals within 28 days of slaughter.
Sheep & Goats		2 cc of 21% emulsion/10 lbs. body weight	Do not drench lambs under 30 lbs. of body weight. Do not treat within 14 days of slaughter. Do not treat animals which are being fed in confinement. Do not treat lactating milk goats. Do not treat sick, weak, over-heated or pregnant animals within one month of lambing or kidding.

*Proprietary name: "Ruelene"

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USDA Summary of Registered Agricultural Pesticide Chemical Uses

p-TERTIARY OCTYLPHENOXY ETHOXY ETHYL DIMETHYL MERCURIC BENZYL
AMMONIUM CHLORIDE

PRINCIPAL FORMULATIONS: 5.15% mixture with 0.01% trioxymethylene and 0.01%
mercuric chlorides

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Barley		0.5 oz./bu.	Seed treatment. Do not use treated seed for food or feed.
Oats		0.5 oz./bu.	Seed treatment. Do not use treated seed for food or feed.
Wheat		0.5 oz./bu.	Seed treatment. Do not use treated seed for food or feed.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

TETRACHLOROETHYLENE

PRINCIPAL FORMULATIONS: Used in mixtures with other toxic ingredients

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Grains:			
Barley		4 gal./	Used in mixtures with grain protectants
Corn		1000 bu.	and certain fumigants.
Oats			
Rice		1 gal./	Used in mixtures with grain protectants.
Rye		1000 sq. ft.	Thoroughly cover exposed surface of
Sorghum (Grain)			stored grain and adjacent areas with
Wheat			spray.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

N-(1,1,2,2-TETRACHLOROETHYLTHIO)-4-CYCLOHEXENE-1,2-DICARBOXIMIDE

PRINCIPAL FORMULATIONS: 80% wettable powder

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Potatoes		lbs. actual/A. 2.5	No time limitations.

*Proprietary name: Difolatan
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Replaces pages issued 2-10-65

USDA Summary of Registered Agricultural Pesticide Chemical Uses

TETRA-iodoethylene

PRINCIPAL FORMULATIONS: 77.75% wettable powder

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Cantaloupes	15	Dip or spray with a 0.3- 0.8% suspension or a 0.2-0.3% wax emulsion	Postharvest application to prevent decay.

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Replaces page 777/ issued 2-10-65
and 778

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THIRAM*

PRINCIPAL FORMULATIONS: 65% wettable powder;
40%, 50% and 75% seed protectants;
2% paste
10% dust

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Apples	7	6.5 lbs. act./A	
Bananas	7	0.16% (in water)	Postharvest application to crowns and fruit following removal of stems, at the rate of 5 gallons per 100 trays (40 lbs. each).
	1 (in pulp)	2.0% paste	Brush application to cut stems and crowns.
Beans			
Lima		1.7 oz./100 lbs.	Seed treatment (dry).
String		1.5 oz./100 lbs.	Seed treatment (slurry) Do not use treated seed for food or feed.
Beans			
Snap		1.1 oz./100 lbs. 1.0 oz./100 lbs.	Seed treatment (dry). Seed treatment (slurry). Do not use treated seed for food or feed.
Celery	7	0.25 lbs./ 1200 sq. ft.	Transplant bed treatment only.
		2.0 lbs.act./A.	7 days. Remove residues by stripping, trimming, and washing.
Corn			
Field		1.5 oz./100 lbs. 1.3 oz./100 lbs.	Seed treatment (dry). Seed treatment (slurry). Do not use treated seed for food or feed.
Sweet		1.5 oz./100 lbs. 4.0 oz./100 lbs.	Seed treatment (dry). Seed treatment (slurry). Do not use treated seed for food or feed.
Cotton		1.5 oz./100 lbs. 1.5 lbs.act/A.	Soil and seed treatment in furrow at time of planting. Furrow treatment.

*Tetramethyl thiuram disulfide
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USDA Summary of Registered Agricultural Pesticide Chemical Uses

THIRAM

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Cottonseed:			
Acid delinted		3.0 oz./100 lbs. 2.3 oz./100 lbs.	Seed treatment (dry) Seed treatment (slurry). Do not use treated seed for food, feed, or oil.
Cowpeas		1.1 oz./100 lbs. 1.0 oz./100 lbs.	Seed treatment (dry). Seed treatment (slurry). Do not use treated seed for food or feed.
Millet		1.2 oz./100 lbs. 2.0 oz./100 lbs.	Seed treatment (dry). Seed treatment (slurry). Do not use treated seed for food, feed, or oil.
Okra		3.0 oz./100 lbs.	Seed treatment. Do not use treated seed for food or feed.
Onions		2.0 lbs. act./A.	Furrow treatment.
Bulbs		8.0 oz./10 lbs.	Bulb treatment (pelletized).
Sets		8.0 oz./10 lbs.	Seed treatment (dry).
Peaches	7	6.5 lbs. act./A.	7 days.
Peanuts			
Shelled		2.25 oz./100 lbs.	Seed treatment (dry or slurry).
Unshelled		1.5 oz./100 lbs.	Seed treatment (dry). Do not use treated seed for food, feed, or oil.
Peas		1.7 oz./100 lbs. 1.5 oz./100 lbs.	Seed treatment (dry). Seed treatment (slurry).
Rice		3.0 oz./100 lbs. 1.7 oz./100 lbs.	Seed treatment (dry). Seed treatment (slurry). Do not use treated seed for food or feed.
Sesame		2.25 oz./100 lbs.	Seed treatment (dry or slurry). Do not use treated seed for food, feed, or oil.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

THIRAM

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Sorghum		1.2 oz./100 lbs.	Seed treatment (dry)
		2.0 oz./100 lbs.	Seed treatment (slurry). Do not use treated seed for food or feed.
		4.0 lbs. act./A.	Preharvest spray directed to seed heads. Seed crop use. Do not use treated grain for feed, food, or oil. Do not graze treated fields.
Soybeans		1.1 oz./100 lbs.	Seed treatment (dry).
		1.0 oz./100 lbs.	Seed treatment (slurry). Do not use treated seed for food or feed.
		1.0 oz./bu.	Planter box seed treatment.
Strawberries	7	3.3 lbs. act./A.	Remove residues by washing if applica- tions are made within 3 days of harvest.
Sweet potatoes		0.75 lb./7 1/2 gals.	Preplanting root dip for 1/2 minute.
Tomatoes	7	2.5 lbs. act./A.	No time limitations.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

TOXAPHENE*

PRINCIPAL FORMULATIONS: Emulsifiable concentrates containing 4, 6, or 8 lbs. per gallon; 50% wettable powder; 10% to 20% dusts

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Alfalfa		2.5	Apply in early spring or after cutting before new growth is 4 inches tall.
		3.5	Do not feed treated forage to dairy animals or animals being finished for slaughter.
Apples	7	16.0	Do not apply after second cover spray or within 40 days of harvest.
Apricots	7	12.0	Do not apply after second cover spray or within 40 days of harvest.
Asparagus		5.0	Post-harvest treatment only.
Avocados		10.0	Do not apply after fruit starts to form. Do not feed treated forage to dairy animals or animals being finished for slaughter.
Bananas	3 (not more than 0.3 in pulp)	1.5	1 day.
Barley	5	3.5	Do not feed treated forage to dairy animals or animals being finished for slaughter. No restriction on the use of the grain.
Barley Seed		2.0 oz./bu.	Do not use as food or feed.

*Chlorinated camphene containing 67% to 69% chlorine

USDA Summary of Registered Agricultural Pesticide Chemical Uses

TOXAPHENE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Beans (including dry, green, and lima)	7	6.0	No limitations on use of shelled beans as human food. Do not apply dusts to green or snap beans within 7 days of harvest. Do not apply sprays to green or snap beans after pods begin to form. Do not feed treated vines to dairy animals or animals being finished for slaughter.
Beans			
Seed		2.0 oz./bu.	Do not use as food or feed.
Beets		6.0	30 days. Do not use tops for food or feed.
Blackberries	7	4.0	Do not apply after fruit begins to form.
Blueberries		4.0	Do not apply after fruit begins to form.
Boysenberries	7	4.0	Do not apply after fruit begins to form.
Broccoli	7	8.0	Do not apply after edible parts begin to form or within 30 days of harvest.
Brussels Sprouts	7	8.0	Do not apply after edible parts begin to form or within 30 days of harvest.
Bush & Vine Fruits:			
Blackberries		25.0	Preplanting soil treatment or when no fruit is present. Single application.
Blueberries			
Boysenberries			
Cranberries		5.0	Wet or dry bait formulation. Do not apply broadcast when edible parts are present.
Currants			
Dewberries			
Gooseberries			
Grapes			
Huckleberries			
Loganberries			
Raspberries			
Strawberries			
Youngberries			

USDA Summary of Registered Agricultural Pesticide Chemical Uses

TOXAPHENE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Cabbage	7	2.5	Do not apply within 7 days of harvest if cabbage will be marketed after outer leaves have been removed. Do not apply after heads start to form if cabbage will be marketed with outer leaves intact.
		4.0	Do not apply after heads start to form.
Carrots	7	5.0	No time limitations.
Cauliflower	7	8.0	Do not apply after edible parts start to form or within 30 days of harvest.
Celery	7	5.0	Do not apply after plants start to bunch or after plants are half mature.
Cherries		12.0	Do not apply within 40 days of harvest or after second cover spray.
Citrus:			
Grapefruit	7	10.0	30 days. Dust, spray, or granular formulations. Do not feed treated forage to dairy animals or animals being finished for slaughter.
Kumquats	7		
Lemons	7		
Limes	7		
Oranges	7		
Tangeloes	7	5.0	Wet or dry bait formulation. Do not apply broadcast when edible parts are present.
Tangerines	7		
		50.0	To be applied as a soil treatment when no fruit is present. Do not feed treated forage to dairy animals or animals being finished for slaughter. Single application.
Clover		2.5	Apply in early spring or after cutting before new growth is 4 inches tall.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

TOXAPHENE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Spinach	7	4.0	Do not apply after seedling stage.
		2.0	21 days. Do not apply more than once per season.
Strawberries	7	3.0	Do not apply after fruit starts to form.
Sugar beets		6.0	Do not apply within 60 days of harvest. Do not feed treated tops to dairy animals or animals being finished for slaughter.
		3.0	60 days. Do not feed treated tops to dairy animals. If meat animals are treated with toxaphene for external parasites, remove tops from diet 6 weeks prior to slaughter.
Sugarcane		3.0	No time limitations.
Sweet potatoes		5.0	To be used in field or plantbed. Do not feed treated vines to dairy animals or animals being finished for slaughter.
Swiss chard		3.0	Do not apply after seedling stage.
Tomatoes	7	2.0	1 day.
		5.0	3 days.
Tropical Fruit:			
Avocados		50.0	To be applied to trunk, scaffold branches and soil. Do not apply when fruit is present. Do not feed treated forage to dairy animals or animals being finished for slaughter. Single application.
Bananas			
Guavas			
Mangoes			
Papayas			
Passion fruit		5.0	Wet or dry bait formulations. Do not apply broadcast when edible parts are present.
Turnips		5.0	Do not apply after seedling stage if tops are to be used as food or feed.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

TOXAPHENE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Vegetables (Root Crops):			
Beets		15.0	Single preplanting soil treatment or before edible parts begin to form.
Carrots			
Garlic			
Horseradish		2.5	Wet or dry bait formulations. Do not apply when edible parts are present, unless dosage is within limits of other applications of this insecticide.
Leeks			
Onions			
Parsnips			
Potatoes			
Radishes			
Rutabagas			
Salsify			
Shallots			
Sweet Potatoes			
Turnips			
(Non-Root Crops):			
Asparagus		25.0	Single preplanting soil treatment or before edible parts begin to form.
Beans			
Blackeyed Peas			
Broccoli		2.5	Wet or dry bait formulations. Do not apply when edible parts are present, unless dosage is within limits of other applications of this insecticide.
Brussels Sprouts			
Cabbage			
Cantaloupes			
Cauliflower			
Celery			
Collards			
Corn			
Cowpeas			
Cucumbers			
Eggplants			
Endive			
Kale			
Kohlrabi			
Lettuce			
Melons			
Mustard Greens			
Okra			
Peas			

USDA Summary of Registered Agricultural Pesticide Chemical Uses

TOXAPHENE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
(Non-Root Crops): (Cont.)		lbs. actual/A.	
Peppers		25.0	Single preplanting soil treatment or before edible parts begin to form.
Pimientos			
Pumpkins		2.5	Wet or dry bait formulations. Do not apply when edible parts are present, unless dosage is within limits of other applications of this insecticide.
Rutabagas			
Spinach			
Squash (summer)			
Squash (winter)			
Swiss Chard			
Tomatoes			
Watermelons			
Velvet Beans		6.0	Do not feed treated vines or pods to dairy animals or animals being finished for slaughter.
Velvet Beans			
Seed		2.0 oz./bu.	Do not use as food or feed.
Vetch		2.5	Apply in early spring or after cutting before new growth is 4 inches tall.
		6.0	Do not feed treated forage to dairy animals or animals being finished for slaughter.
Walnuts	7	15.0	Dust or spray. No time limitations.
Watercress		4.0	Do not apply after seedling stage.
Wheat	5	3.5	Do not feed treated forage to dairy animals or animals being finished for slaughter. No restriction on the use of the grain.
Wheat			
Seed		2.0 oz./bu.	Do not use as food or feed.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

TOXAPHENE

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Animals:		lbs. actual/A.	
Beef Cattle	7 (in fat)	0.6% (in water)	Dip or spray. Do not apply within 28 days of slaughter.
		5.0% (dust)	Dust animals thoroughly. Do not apply within 28 days of slaughter.
		8.0% (in oil)	Apply by backrubbers. Do not permit animals access to treatment within 28 days of slaughter.
		2.0%	Apply locally as screw-worm and ear tick treatment. Formulated in combination with other insecticides as smear or liquid.
Dairy Cattle		2.0%	Apply locally as screw-worm and ear tick treatment. Formulated in combination with other ingredients as smear or liquid.
Goats	7 (in fat)	0.6% (in water)	Dip or spray. Do not apply within 28 days of slaughter.
Sheep		5.0% (dust)	Do not use on dairy goats. Dust animals thoroughly. Do not apply within 28 days of slaughter.
		2.0%	Apply locally as screw-worm and fleece worm treatment. Formulated in combination with other insecticides.
Swine	7 (in fat)	0.6% (in water)	Dip or spray. Do not apply within 28 days of slaughter.
		5.0% (dust)	Dust animals thoroughly. Do not apply within 28 days of slaughter.
		8.0% (in oil)	Apply by rubbing devices. Do not permit animals access to this treatment within 28 days of slaughter.

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TRICHLOROETHYLENE

PRINCIPAL FORMULATIONS: Used in fumigant mixtures or as a solvent with other toxic ingredients.

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Barley		0.4 gal./ 1000 bu.	Used in combination with other fumigants. No time limitations.
Corn			
Shelled		0.6 gal./ 1000 bu.	Used in combination with other fumigants. No time limitations.
Grains:			
Barley		1 gal. of 10% spray per 1000 sq. ft.	Used as a solvent in combination with other chemicals. Apply as spray over surface of stored grain and adjacent areas. Repeat as necessary.
Corn			
Oats			
Rice			
Rye			
Sorghum (Grain)			
Wheat			
Grain Sorghum		0.8 gal./ 1000 bu.	Used in combination with other fumigants. No time limitations.
Oats		0.4 gal./ 1000 bu.	Used in combination with other fumigants. No time limitations.
Wheat		0.4 gal./ 1000 bu.	Used in combination with other fumigants. No time limitations.

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2,4,5-TRICHLOROPHENOXYACETIC ACID*

PRINCIPAL FORMULATIONS: 1/ (Amine salts) 25.6%-57.2% liquids
(Ester emulsifiable concentrates) volatile: 18%-57%
low volatile: 8-90%: 5/19% triethanolamine salt

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Apples (McIntosh)		20 ppm spray (acid equiv.)	Preharvest drop control. Apply a single application 4-5 days before drop normally begins.
Blueberries (low bush)		1.0 (acid equiv.)	Spray on revolving cloth-covered drum held above blueberry foliage. Apply during June and July of season preceding a burn. Do not apply within 2 years of harvesting berries.
Grains, cereal (undesigned)		.5	Apply when grain is in tiller to boot stage and weeds are in actively growing condition. Do not apply from boot to milk stage or in seedling stage.
Pastures:			
Grasses		3	Heavy brush. Apply when in full leaf and after grass is well established.
		1	Light brush. Apply when leaves are fully expanded.
Rangeland clearance		4	Apply in spring by airplane when brush is in heavy foliage stage (40-90 days after leaves unfold).
Rice		1.25	Apply tiller to boot and before flooding (4-8 weeks after rice emerges).
		1.5	Apply after flooding (2-3 weeks) or 7-10 weeks after planting.
Sugarcane		1	Preemergence use only. (Louisiana). If cane is shaved and off-barred, treat immediately following this operation.
		4.5	Preemergence use only. (Hawaii) Apply just before cane emerges.

*2,4,5-T

1/ May also be combined with 2,4-D and used at stooling stage on grain crops including barley, oats, and wheat, and on grass seed crops.

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2,4,5-TRICHLOROPHENOXYACETIC ACID

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Sugarcane (cont.)		lbs. actual/A. 1	Postemergence (weeds in established cane). Apply over row when weeds are growing vigorously. Do not apply after cane is 2 feet tall.
Lakes Ponds		4 (with 20 lbs./A. 2,4-D as ester)	Broadcast application in early spring to summer. Do not use treated water for crop irrigation or livestock drinking water.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

2,3,6-TRICHLOROPHENYLACETIC ACID, SODIUM SALT*

PRINCIPAL FORMULATIONS: 16.1% liquid

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Sugarcane		lbs. acid equiv./acre 8.0	Preemergence application in fall to plant cane or in spring after shaving and off- barring to field planted cane. Do not use bagasse for feed or forage.

*Proprietary Name: "Fenac"

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USDA Summary of Registered Agricultural Pesticide Chemical Uses

TRIETHANOLAMINE

PRINCIPAL FORMULATIONS: With various toxicants as animal remedies

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Animals: Beef Cattle Dairy Cattle Goats Sheep Swine		10%	Formulated with other ingredients and applied locally as a screw-worm or ear tick remedy.

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3-(m-TRIFLUOROMETHYLPHENYL)-1,1-DIMETHYLUREA

PRINCIPAL FORMULATIONS: 80% wettable powder

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Cotton (seed crop)		lbs. actual/A. 2.0	Preemergence application (may be incorporated through soil). Do not use seed for food, feed, or oil purposes. or Postemergence application up to layby as a directed spray to weeds less than 2 inches tall. Do not use seed for food, feed, or oil purposes.

Proprietary name: Cotoran
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TRIFLURALIN*

PRINCIPAL FORMULATIONS: 44% emulsifiable concentrate containing 4 lbs. actual/gal.;
10% wettable powder

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Beans (dry)		1.0	Preplanting soil application. Incorporate with soil immediately. Plant crop immediately or within 3 weeks after application. Do not graze or feed forage from treated fields to livestock.
Beans (lima)		0.75	Preplanting soil application. Incorporate with soil immediately. Plant crop immediately or within 3 weeks after application. Do not graze or feed forage from treated fields to livestock.
Beans (snap)		0.75	Preplanting soil application. Incorporate with soil immediately. Plant crop immediately or within 3 weeks after application. Do not graze or feed forage from treated fields to livestock.
Broccoli		1.0	Preplanting soil application. Incorporate with soil. Transplant crop immediately to 3 weeks after treatment. or Posttransplanting soil application as a directed spray when transplants no longer wilt. Incorporate with soil. Do not graze or feed forage from treated fields to livestock.
Brussels sprouts		1.0	Preplanting soil application. Incorporate with soil. Transplant crop immediately to 3 weeks after treatment. or Posttransplanting soil application as a directed spray when transplants no longer wilt. Incorporate with soil. Do not graze or feed forage from treated fields to livestock.

*a,a,a-trifluoro-2,6-dinitro-N,N-di-propyl-p-toluidine

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TRIFLURALIN

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Cabbage		lbs. actual/A. 1.0	Preplanting soil application. Incorporate with soil. Transplant crop immediately to 3 weeks after treatment. or Posttransplanting soil application as a directed spray when transplants no longer wilt. Incorporate with soil. Do not graze or feed forage from treated fields to livestock.
Cauliflower		1.0	Preplanting soil application. Incorporate with soil. Transplant crop immediately to 3 weeks after treatment. or Posttransplanting soil application as a directed spray when transplants no longer wilt. Incorporate with soil. Do not graze or feed forage from treated fields to livestock.
Cotton		1.0	Preplanting soil application up to 2-3 weeks before planting, incorporate with soil immediately. Do not graze or feed forage from treated fields to livestock. or Preemergence application immediately after planting and incorporate with soil. Do not graze or feed forage from treated fields to livestock. or Postemergence soil application. Single application from emergence to last cultivation. Incorporate into soil. Do not apply within 90 days of harvest. Do not graze or feed forage from treated fields to livestock.
Okra		1.0	Preplanting soil application. Incorporate with soil immediately. Plant crop immediately, or within 3 weeks after application. Do not graze or feed forage from treated fields to livestock.

USDA Summary of Registered Agricultural Pesticide Chemical Uses

TRIFLURALIN

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Peanuts (Spanish)		lbs. actual/A. 0.5	Preplanting soil application. Incorporate with soil. Plant crop immediately to 3 weeks after treatment. or Preemergence soil application immediately after planting. Incorporate with soil. Do not graze or feed forage from treated fields to livestock.
Peanuts (seed crop)		0.75	Preplanting or preemergence soil incorporation. Use with Diphenamid. Do not graze treated area or feed forage from treated fields to livestock. Do not use seed from treated fields for food, feed, or oil.
Peas (Southern)		1.0	Preplanting soil application. Incorporate with soil immediately. Plant crop immediately or within 3 weeks after application. Do not graze or feed forage from treated fields to livestock.
Peppers		1.0	Preplanting soil application. Incorporate with soil. Transplant crop immediately to 3 weeks after treatment. or Posttransplanting soil application as a directed spray when transplants are no longer wilted. Incorporate into soil. Do not graze or feed forage from treated fields to livestock. or Postemergence application to direct seeded crop at time of blocking as a directed spray. Incorporate into soil immediately. Do not graze or feed forage from treated fields to livestock.

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TRIFLURALIN

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
Safflower		lbs. actual/A. 1.5	Preplanting soil application. Incorporate with soil immediately. Plant crop immediately or within 3 weeks after application. Do not graze or feed forage from treated fields to livestock.
Soybeans		1.0	Preplanting soil application. Incorporate with soil immediately. Plant crop immediately or within 3 weeks after application. Do not graze or feed forage from treated fields to livestock.
Tomatoes		1.0	Preplanting soil application. Incorporate into soil. Transplant crop immediately to 3 weeks after treatment. or Posttransplanting soil application as a directed spray when transplants no longer wilt. Incorporate with soil. or Postemergence application to direct seeded crop at time of blocking as a directed spray. Incorporate into soil immediately. Do not graze or feed forage from treated fields to livestock.

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USDA Summary of Registered Agricultural Pesticide Chemical Uses

ZINC DI-ETHYLDITHIOCARBAMATE - MERCAPTOBENZOTHAZOLE (MIXTURE)

PRINCIPAL FORMULATIONS: Zinc salt (powder) containing 59.8% dimethyldithiocarbamate and 5.2% 2-mercaptobenzothiazole

USE	TOLERANCE (ppm)	DOSAGE lbs. actual/A.	LIMITATIONS
Almonds	0.1 (Ziram)	7.8	Up to petal fall.
Blueberries	7 (Ziram)	1.0	Do not apply after second cover spray or within 3 weeks of harvest.
Potatoes		3.25	Up to harvest.
Tomatoes	7 (Ziram)	3.25	5 days.

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ZINC ION + MANGANESE ETHYLENE BISDITHIOCARBAMATE COMPLEX

PRINCIPAL FORMULATIONS: 80% wettable powder

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Asparagus		1.6	Postharvest application to ferns.
Bananas	15 (not more than 2 in pulp)	3.2	Aerial application only.
		0.38% solution	Postharvest dip of cut hands or stems prior to shipment.
Cantaloupe	7	2.4	No time limitations.
	0 (edible parts)		
Casaba	7	2.4	No time limitations.
	0 (edible parts)		
Cotton		1.2	In furrow or planterbox application only.
Cucumber		2.4	Do not apply after edible parts begin to form.
Honeydew melon	7	2.4	No time limitations.
	0 (edible parts)		
Muskmelon	7	2.4	No time limitations.
	0 (edible parts)		
Onions (dry bulb)		2.4	7 days. Do not apply to exposed bulbs.

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ZINC ION + MANGANESE ETHYLENE BIDDITHIOCARBAMATE COMPLES

USE	TOLERANCE (ppm)	DOSAGE	LIMITATIONS
		lbs. actual/A.	
Papayas	10	2.0	No time limitations.
Pecans		15.0	60 days. Do not graze livestock on treated areas.
Peppers		1.8	Do not apply after fruit buds form.
Persian melons	7	2.4	No time limitations.
	0 (edible parts)		
Pineapples		16.0	Do not apply after fruit buds form.
Potatoes		1.6	No time limitations.
Pumpkins		2.4	Do not apply after edible parts begin to form.
Squash		2.4	Do not apply after edible parts begin to form.
Sugar beets		2.4	10 days. Do not feed treated tops to livestock.
Tomatoes		1.6	Do not apply after fruit buds form.
Watermelon	7	2.4	No time limitations.
	0 (edible parts)		

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